



# — 4/8/16CH H264 DVR —



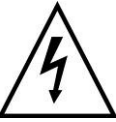



## USER GUIDE

**Unit 3, 3-5 Gilda Crt  
Mulgrave VIC 3170  
T: 1300 688 788**

[www.omnivision.net.au](http://www.omnivision.net.au)

[info@omnivision.net.au](mailto:info@omnivision.net.au)

 <div data-bbox="379 248 628 347" style="border: 1px solid black; padding: 2px; text-align: center;"> <b>CAUTION</b>  RISK OF ELECTRIC SHOCK  DO NOT OPEN </div> 	<p><b>WARNING</b></p> <p>TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.</p>
<p><b>CAUTION :</b> TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.</p>	
 <p>This symbol is intended to alert the user to the presence of unprotected "Dangerous voltage" within the product's enclosure that may be strong enough to cause a risk of electric shock.</p>	<p><b>NOTE:</b> This equipment has been tested and found to comply with the limits for a class digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at their expense.</p>
 <p>This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.</p>	



**Disposal of Old Electrical & Electronic Equipment (Applicable in the European Union and other European countries with separate collection systems)**

This symbol on the product or on its packaging indicates that this product shall not be treated as household waste. Instead it shall be handed over to the applicable collection point for the recycling of electrical and electronic equipment. By ensuring this product is disposed of correctly, you will help prevent potential negative consequences for the environment and human health, which could otherwise be caused by inappropriate waste handling of this product. The recycling of materials will help to conserve natural resources. For more detailed information about recycling of this product, please contact your local city office, your household waste disposal service or the shop where you purchased the product.

# TABLE OF CONTENTS

<b>CHAPTER 1 PANEL LOCATION .....</b>	<b>1</b>
<b>1-1 FRONT PANEL CONTROLS.....</b>	<b>1</b>
<b>1-2 16CH REAR PANEL CONNECTORS.....</b>	<b>2</b>
<b>1-4 8CH REAR PANEL CONNECTORS.....</b>	<b>3</b>
<b>1-5 4CH REAR PANEL CONNECTORS.....</b>	<b>4</b>
<b>CHAPTER 2 LIVE, PLAYBACK AND PTZ OPERATIONS.....</b>	<b>5</b>
<b>2-1 LIVE MODE .....</b>	<b>5</b>
<b>2-2 PLAYBACK MODE .....</b>	<b>8</b>
<b>2-3 PTZ MODE .....</b>	<b>10</b>
<b>CHAPTER 3 MAIN MENU SETUP .....</b>	<b>12</b>
<b>3-1 RECORD SETUP.....</b>	<b>14</b>
3-1.1 QUALITY & FRAME RATE SETUP.....	15
<b>3-2 EVENT SETUP.....</b>	<b>16</b>
3-2.1 MOTION SETUP .....	16
3-2.2 SENSOR SETUP.....	18
<b>3-3 SCHEDULE SETUP .....</b>	<b>19</b>
3-3.1 SCHEDULE RECORD SETUP.....	20
3-3.2 HOLIDAY SETUP.....	20
<b>3-4 CAMERA SETUP .....</b>	<b>21</b>
<b>3-5 ACCOUNT SETUP .....</b>	<b>22</b>
3-5.1 PERMISSION SETUP .....	23
3-5.2 USER PICTURE SETUP .....	23
<b>3-6 NETWORKING SETUP.....</b>	<b>24</b>
3-6.1 NETWORKING SETUP .....	24
3-6.2 HTTP SETUP .....	26
3-6.3 DDNS SETUP .....	27
3-6.4 MAIL SETUP.....	27
<b>3-7 PTZ &amp; RS485 SETUP .....</b>	<b>28</b>
<b>3-8 SYSTEM SETUP.....</b>	<b>29</b>
3-8.1 DISPLAY SETUP.....	30
3-8.2 DATE/TIME SETUP .....	31
3-8.3 BUZZER & RELAY SETUP.....	33
3-8.4 SPOT SETUP .....	34
<b>3-9 UTILITY SETUP .....</b>	<b>35</b>
<b>3-10 DIAGNOSTIC .....</b>	<b>36</b>
<b>CHAPTER 4 BACKUP &amp; SEARCH.....</b>	<b>37</b>
<b>4-1 BACKUP MENU .....</b>	<b>37</b>
<b>4-2 SEARCH MENU .....</b>	<b>38</b>
4-2.1 EVENT SEARCH.....	38
<b>CHAPTER 5 REMOTE SOFTWARE INSTALLATION AND SETUP .....</b>	<b>41</b>

<b>5-1 INSTALLING AND USING THE REMOTE DESKTOP CLIENT .....</b>	<b>41</b>
<b>5-2 REMOTE MONITORING THROUGH IE.....</b>	<b>43</b>
<b>5-3 REMOTE DESKTOP SOFTWARE OPERATION.....</b>	<b>45</b>

## **CHAPTER 6 SPECIFICAITONS..... 46**

## **CHAPTER 7 MOBILE APPLICATION INSTALLATION AND USAGE..... 49**

<b>7-1 MOBILE APPLICATION INSTALLATION AND OPERATION FOR SYMBIAN SYSTEM.....</b>	<b>49</b>
7-1.1 JAVA MOBILE APPLICATION INSTALLATION .....	49
7-1.2 MOBILE APPLICATION OPERATION .....	50
7-1.3 LIVE MONITORING OPERATION .....	51
<b>7-2 MOBILE APPLICATION INSTALLATION AND OPERATION FOR WINDOWS MOBILE SYSTEM.....</b>	<b>54</b>
7-2.1 MOBILE APPLICATION INSTALLATION .....	54
7-2.2 MOBILE APPLICATION OPERATION .....	55
7-2.3 USING THE MOBILE APPLICATION .....	56
<b>7-3 MOBILE APPLICATION INSTALLATION AND OPERATION FOR BLACKBERRY SYSTEM</b>	<b>57</b>
7-3.1 SOFTWARE INSTALLATION .....	57
7-3.2 MOBILE SOFTWARE OPERATION .....	59
7-3.3 LIVE IMAGE OPERATION.....	63
<b>7-4 MOBILE APPLICATION INSTALLATION AND OPERATION FOR APPLE IPHONE .....</b>	<b>65</b>
7-4.2 MOBILE SOFTWARE OPERATION.....	67
7-4.3 LIVE IMAGE OPERATIONS .....	67
<b>7-5 MOBILE APPLICATION INSTALLATION AND OPERATION FOR ANDROID PHONES.....</b>	<b>68</b>
7-5.1 SOFTWARE INSTALLATION .....	68
7-5.2 MOBILE SOFTWARE OPERATION.....	69
7-5.3 LIVE IMAGE OPERATIONS .....	71

## **CHAPTER 8 CMS INSTALLATION AND USAGE GUIDE ..... 73**

<b>8-1 CMS INSTALLATION .....</b>	<b>73</b>
<b>8-2 CMS LOGIN AND ENVIRONMENT.....</b>	<b>75</b>
<b>8-3 DVRs, GROUPS &amp; EVENTS.....</b>	<b>77</b>
8-3.1 VIEW DVR / GROUP LIST .....	77
8-3.2 VIEW EVENT LOGS .....	78
<b>8-4 LOCAL PC INFORMATION AND CONTROL .....</b>	<b>78</b>
<b>8-5 MAIN DISPLAY.....</b>	<b>79</b>
8-5.1 AUDIO CONTROL .....	79
8-5.2 EMAP DISPLAY.....	80
8-5.3 PTZ CONTROL .....	81
<b>8-6 OPERATION BAR.....</b>	<b>82</b>
8-6.1 USER ADMINISTRATION .....	83
8-6.2 DVR ADMINISTRATION .....	83
8-6.3 GROUP ADMINISTRATION .....	84
8-6.4 EMAP ADMINISTRATION .....	85
8-6.5 REMOTE PLAY.....	86
8-6.6 HDD PLAYBACK.....	87
8-6.7 FILE PLAYBACK .....	87
8-6.8 EVENT PLAYBACK .....	88
8-6.9 SNAPSHOT DATA.....	88
8-6.10 RECORDING DATA.....	89

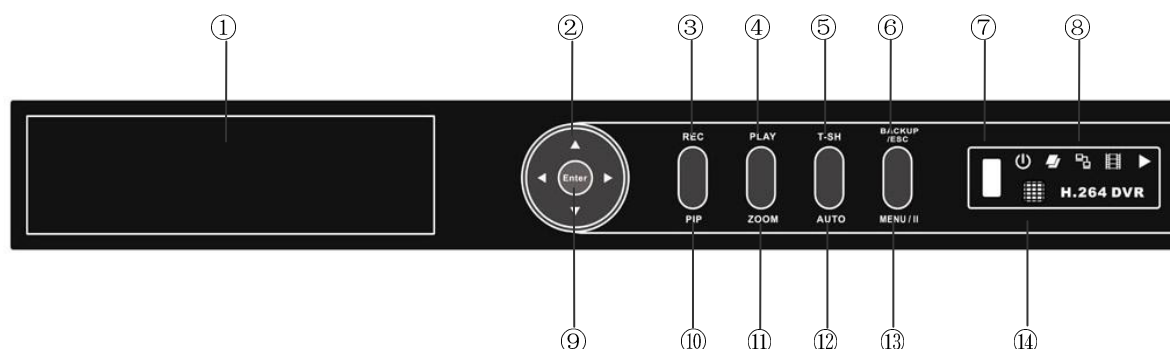
## **APPENDIX I REMOTE MONITORING IE ACTIVEX CONTROL INSTALLATION I**



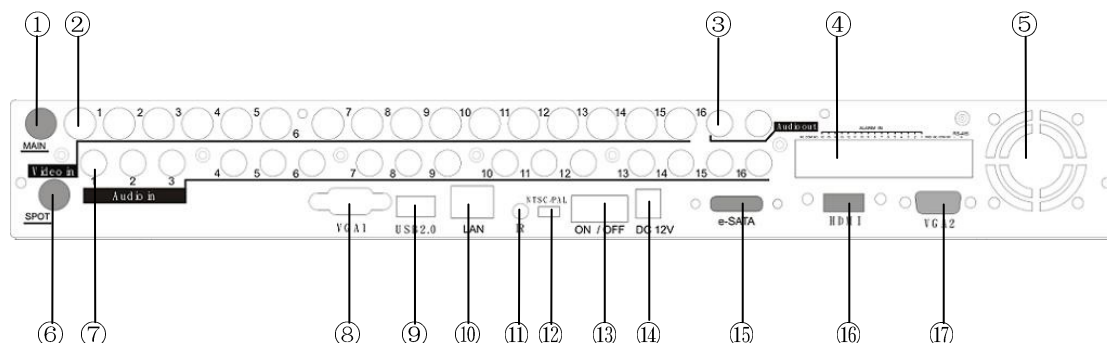
<b>NSTRUCTION .....</b>	<b>90</b>
-------------------------	-----------

## CHAPTER 1 PANEL LOCATION

### 1-1 FRONT PANEL CONTROLS

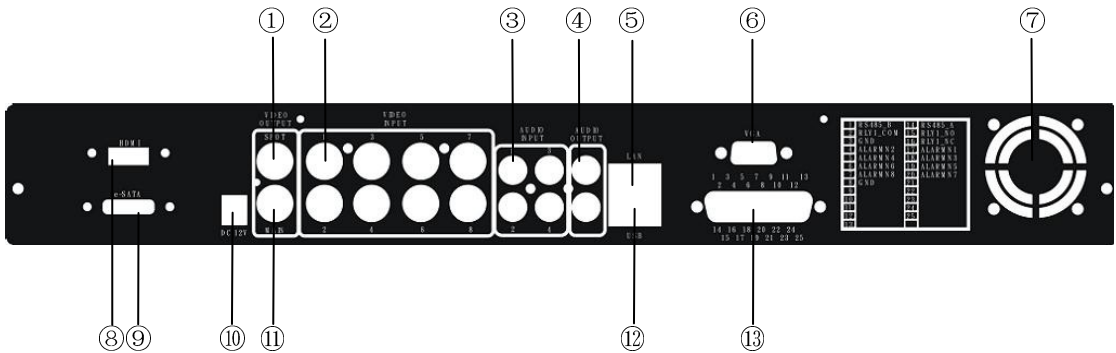


Control Keys	Description
① DVD Writer	Optional DVD-RW backup device.
② ▼ / ■	In SETUP mode, press to move cursor down. In PLAYBACK mode, press to stop playing back.
▲ / SLOW	In SETUP mode, press to move cursor up. In PLAYBACK mode, press to slow down.
▶ / ►►	In SETUP mode, press to increase value. In PLAYBACK mode press to play forwards.
◀ / ◀◀	In SETUP mode, press to reduce value. In PLAYBACK mode, press to play rewind.
③ REC	Start or stop recording.
④ PLAY	Play back in normal speed.
⑤ T-SRH	Display the search menu.
⑥ BACKUP/ESC	In LIVE mode, press to display the BACKUP menu. In SETUP mode, press to return to previous page.
⑦ USB 2.0 Port	Port for USB external devices (USB flash drive devices use, the mouse behind the back of the USB ports installed)..
⑧ LED Display (From left to right)	<b>Power:</b> Power is on. <b>HDD:</b> Hard disk is in use. <b>LAN:</b> Connected to the internet ( <i>in red</i> ): Remote user logged in. <b>REC:</b> Recording. <b>PLAY:</b> Playing back.
⑨ ENTER/MODE	In SETUP mode, press to enter values. In PLAYBACK mode, switch between full, quad, 9-channel, 16-channel display in order.
⑩ PIP	In LIVE mode, display with picture in picture format.
⑪ ZOOM	In LIVE or PLAYBACK mode, enlarge the display of a channel.
⑫ AUTO	Auto Sequence display.
⑬ MENU/II	In LIVE mode, press to display menu. In PLAYBACK mode, press to pause playback.
⑭ IR Sensor	Input sensor for the remote control.

**1-2 16CH REAR PANEL CONNECTORS**

① MAIN monitor	BNC port for the main monitor. You can switch to SPOT monitor by GUI setting.
② VIDEO IN	BNC input ports for cameras, 16 in total.
③ AUDIO OUT	RCA output port for audio signal.
④ EXTERNAL I/O	EXTERNAL I/O port.
⑤ Fan	DC 12V 40mm X 40mm fan.
⑥ SPOT monitor	BNC port to display full screen image of all installed cameras in sequence. (depends on model)
⑦ AUDIO IN	RCA input port for audio signal. 4 ports available for 4CH/8CH. 16 ports available for 16CH.
⑧ VGA1	VGA port.
⑨ USB 2.0 port	USB port. (Device USB Mouse).
⑩ LAN	Network port.
⑪ IR JACK	IR extension cable jack.
⑫ NTSC/PAL	Switch NTSC/PAL Video.
⑬ ON/OFF	Power Switch.
⑭ DC 12V	Socket for a DC 12V input.
⑮ e-SATA	External SATA hard disks port for expanding recording space. (ZA series only)
⑯ HDMI	HDMI port.
⑰ VGA2	VGA port. (depends on model)

1-3 8CH REAR PANEL CONNECTORS



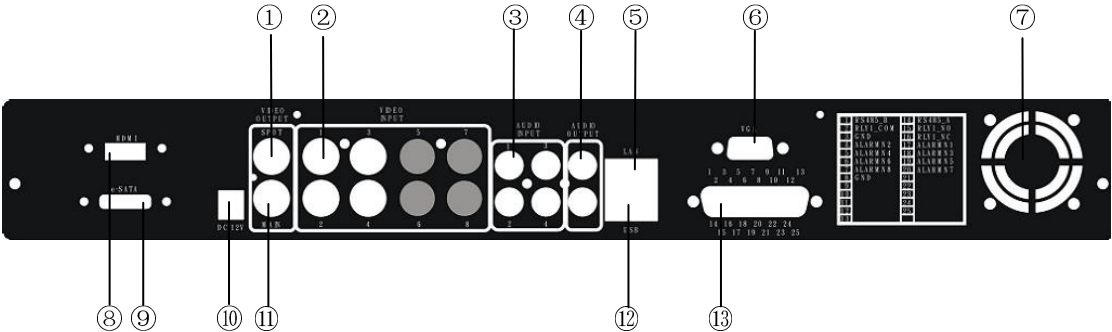
① SPOT monitor	BNC port to display full screen image of all installed cameras in sequence. (depends on model)
② VIDEO IN	BNC input ports for cameras, 8 in total.
③ AUDIO IN	RCA input port for audio signal. There are 4 ports available. (corresponding to channel 1 to 4)
④ AUDIO OUT	RCA output port for audio signal.
⑤ LAN	Network port
⑥ VGA	VGA port
⑦ Fan	DC 12V 40mm X 40mm fan
⑧ HDMI	HDMI port
⑨ e-SATA	External SATA hard disks port for expanding recording space
⑩ DC 12V	Socket for a DC 12V input.
⑪ MAIN monitor	BNC port for the main monitor. You can switch to SPOT monitor by GUI setting.
⑫ USB	USB port (Device USB Mouse)
⑬ EXTERNAL I/O	EXTERNAL I/O port (see below for pin definition)

DB 25 DEFINITION

1	13
2	12
3	11
4	10
5	9
6	8
7	7
8	6
9	5
10	4
11	3
12	2
13	1

1. RS485_B	14. RS485_A
2. RLY1_COM	15. RLY1_NO
3. GND	16. RLY1_NC
4. ALARMN2	17. ALARMN1
5. ALARMN4	18. ALARMN3
6. ALARMN6	19. ALARMN5
7. ALARMN8	20. ALARMN7
8. GND	21.
9.	22.
10.	23.
11.	24.
12.	25.
13.	

1-4 4CH REAR PANEL CONNECTORS



① SPOT monitor	BNC port to display full screen image of all installed cameras in sequence. (depends on model)
② VIDEO IN	BNC input ports for cameras, 4 in total.
③ AUDIO IN	RCA input port for audio signal. There are 4 ports available. (corresponding to channel 1 to 4)
④ AUDIO OUT	RCA output port for audio signal.
⑤ LAN	Network port
⑥ VGA	VGA port
⑦ Fan	DC 12V 40mm X 40mm fan
⑧ HDMI	HDMI port
⑨ e-SATA	External SATA hard disks2 port for expanding recording space
⑩ DC 12V	Socket for a DC 12V input.
⑪ MAIN monitor	BNC port for the main monitor. You can switch to SPOT monitor by GUI setting.
⑫ USB	USB port (Device USB Mouse)
⑬ EXTERNAL I/O	EXTERNAL I/O port (see below for pin definition)

DB 25 DEFINITION

1	13
14	25
1. RS485_B	14. RS485_A
2. RLY1_COM	15. RLY1_NO
3. GND	16. RLY1_NC
4. ALARMN2	17. ALARMN1
5. ALARMN4	18. ALARMN3
6. ALARMN6	19. ALARMN5
7. ALARMN8	20. ALARMN7
8. GND	21.
9.	22.
10.	23.
11.	24.
12.	25.
13.	





## CHAPTER 2 LIVE, PLAYBACK AND PTZ OPERATIONS

The IR remote control and the mouse operate differently under each mode; this chapter describes the functions of them under the three different modes: LIVE, PLAYBACK and PTZ.

### 2-1 LIVE Mode



















You can monitor all the channels, listen to audio signal and have some related operations under LIVE mode. This paragraph describes the IR remote control, mouse operation and on screen graphical icons under LIVE mode.

**Table 2-1.1** Functions of remote control under LIVE mode

Button	Description
<b>REC</b>	Start/Stop recording.
<b>PLAY</b>	Start playing back the most recently recorded segment.
<b>LOCK</b>	Enable/Disable the Keypad function
<b>1,2,3,4</b>	Select the channel to monitor in full screen
<b>FREEZE</b>	Turn on/off screen freeze function.
	Switch to quad display.
	Switch to 9-channel display. 4ch DVR doesn't feature this function.
	Switch to 13-channel display. 4ch DVR doesn't feature this function.
	Switch to 16-channel display. 4ch DVR doesn't feature this function.
<b>ENTER/MODE</b>	Switch to full screen, quad display.
<b>MENU/</b>	Enable/ Disable setup Menu.
<b>BK-UP/ESC</b>	Enable/ Disable backup menu.
<b>SRH</b>	Enable/ Disable search menu.
<b>MUTE</b>	Switch channel 1 output audio / turn off LIVE audio
<b>STATUS</b>	Enable/ Disable Status.
<b>OSD</b>	Turn on/off the screen display
<b>Zoom/Zoom -</b>	Enable/ Disable double screen size display. You can click on the channel name for choosing a specific channel.
<b>PIP/Zoom +</b>	Turn on picture-in-picture format. Click on the channel name can switch to other channels.
<b>PTZ</b>	Enable PTZ control.
<b>AUTO</b>	In AUTO mode, all available channels will be cycled through in full screen.
<b>DVR1,2,3,4</b>	Switch DVR ID1~4


















**Note :** 4CH will show quad display; 8 CH will show quad and 9-channel display.







**Table 2-1.2** Graphical icons that will display after right-clicking your mouse under LIVE mode

Icon	Description
	Resting the cursor on this icon will bring up the following four menu icons.
	Main menu.
	Search menu.
	Backup menu.
	PTZ mode.
	Turn on/off recording.
	Playback.
	Resting the cursor on this icon will bring up the following five display icons.
	FREEZE.
	PIP, picture in picture
	ZOOM, double the screen size
	AUTO-sequence
	LOCK, activate the key lock.
	Full screen display.
	Quad display.
	9-channel display.
	13-channel display.
	16-channel display.

**Note :** 4CH will show quad display; 8 CH will show quad display and 9-channel display.

**Table 2-1.3** Description of onscreen icons in LIVE mode

Icon	Description
	Recording is on
	Schedule Recording is on
	Live Audio is on
	Live Audio is off
	Motion detected on the channel
	Sensor triggered on the channel
	Video loss detected on the channel
	USB device detected
	DVD burner is detected
	Connected to the LAN cable.
	AUTO-seq is on
	Freeze is on, screen is frozen
	LOCK is on
	PTZ control is on
	Remote control ID has been set to 1 ~ 4.
	Shows the current hard disk space has been used (99% mean used space is 99%, remaining space is 1%)
	Lower right of each CH will show the current time

Icon	Description
	Image quality (High/Low)
	Full screen
	Record
	Snap shot
	Record and snap shot file saving path setup
	Enable / Disable Shortcut Toolbar



2-2 PLAYBACK Mode


Switch to PLAYBACK mode by pressing “PLAY” under the LIVE mode, the graphical icon  will show up on the upper center of the screen and the operation panel (see below picture) will show up at right lower corner of the screen. You can drag the panel by mouse to place it on any location of your screen.














Table 2-2.1 Remote control functions under the PLAYBACK mode

Button	Description
ENTER / MODE	Switch to full screen, quad, 9-channel or 16-channel display.
MENU / II	Turn on/off PAUSE.
PLAY	Play back at normal speed.
▲ / SLOW	Play back at slower speed. The speed will be slowed to 1/2, 1/4, 1/8, 1/16 by each pressing of the button till the slowest limitation of 1/16 of the normal speed. Current playback speed is shown in the upper center of the screen.
◀◀ / ◀	Fast rewind. Each press increases the speed to the next level. There are six speeds: 2x, 4X, 8X, 16x, 32X and 64X.
▶▶ / ▶	Fast forward. Each press increases the speed to the next level. There are six speeds: 2x, 4X, 8X, 16x, 32X and 64X.
▼ / ■	Stop playback.




Table 2-2.2 The mouse operation under the PLAYBACK mode.

Icon	Description
	「 ◀◀ / ◀ 」 Fast rewind
	「 ▶▶ / ▶ 」 Fast forward
	Play/pause
	「 ▲ / SLOW 」, slow playback
	「 ▼ / ■ 」 stop playback
	Frame by frame playback
	Full screen display
	Quad display
	9-channel display
	16-channel display
	Zoom-in display

**Note : 4CH will show quad display; 8 CH will show quad display and 9-channel display.**

## 2-3 PTZ Mode

Switch to the PTZ mode by pressing “PTZ” button under the LIVE mode. The PTZ icon  will appear on upper left side of the screen and the control panel will appear on the bottom right side of screen.



**Table 2-3.1** Remote Control functions under the PTZ mode

Button	Description
▲ / SLOW	Move PTZ up.
▼ / ■	Move PTZ down.
◀◀ / ◀	Move PTZ to the left.
▶▶ / ▶	Move PTZ to the right.
ZOOM +	PTZ zoom-in.
ZOOM -	PTZ zoom-out.
FOCUS +	PTZ focus-in.
FOCUS -	PTZ focus-out.
IRIS +	PTZ iris-open.
IRIS -	PTZ iris-close.
TOUR	Activate PTZ pre-set tour. *
PRESET+ Number	Setup the Preset location Press “ <b>PRESET</b> ” key first then two-digit number; DVR will set the current PTZ location at entered preset number.
PLAY+ Number	Go to Preset location Press “ <b>PLAY</b> ” key first then two-digit number, PTZ will go to the correspondent preset number location.
PIP	Set current PTZ location as the start of line-scan. *
FREEZE	Activate auto line-scan. *
ZOOM	Set current PTZ location as the end of line-scan. *

- \* PTZ communication protocols differ from manufacturer to manufacturer and are not compatible 100%. Therefore, some of these functions may be unavailable in some PTZ protocols.



**Table 2-3.2** Mouse operations under the PTZ mode

Icon	Description
	Leave PTZ Mode, back to the LIVE mode
	Pre-set number N. (0~255)
	Go to pre-set number N.
	Set current PTZ location at pre-set number N.
	「TOUR」, press to activate pre-set tour*
	「PIP」, Set current PTZ location as the start of line-scan. *
	「FREEZE」, Activate line-scan. *
	「ZOOM」, Set current PTZ location as the end of line-scan. *
	To move PTZ in 360°
	PTZ zoom in; PTZ zoom out
	PTZ focus in; PTZ focus out.
	PTZ IRIS open, PTZ IRIS close.
Following functions are protocol related. Please check the user manual of your PTZ for more details.	
	AUX 1~8, 「AUTO」 Key + Number key 「1~8」
	「Backup」, Customized function.







- \* PTZ communication protocols differ from manufacturer to manufacturer and are not compatible 100%. Therefore, some of these functions may be unavailable in some PTZ protocols.

### CHAPTER 3 MAIN MENU SETUP

To enter the main menu and set up of the DVR a user id and a password is required. The default password for the administrator is “123456”. Please check the “Account Setup” for related setup of other log-in users.



**Table 3-0.1** Onscreen virtual keyboard functions.

Item	Description
	Switch between capital and small letters.
	Switch between numbers and letters.
	Press to cancel the setup, and re-choose the login account.
	Delete the last character.
	Enter to identify the password. It will enter the set up menu, If the password is verified.
	Space key



**Table 3-0.2** Functionality of the remote control in setup mode

Item	Description
◀ ▶	Switch to different options under one item
▲ ▼	Switch to different items
MENU	Save setup and back to LIVE mode
ESC	Back to Upper level of menu without saving
ENTER	Enter the menu, or display virtual keyboard

*PS. All new HDD's needs to be initialized before recording can be started please refer to "3-9 UTILITY SETUP" for detail.*

### 3-1 RECORD SETUP



Item	Description
<b>HDD FULL</b>	<p>Select STOP to stop recording or OVERWRITE to reuse the HDD when HDD is full</p> <p>「<b>Stop</b>」: Stop Recording</p> <p>「<b>Overwrite</b>」: Start to overwrite that begin from the oldest data of HDD, and continue to record.</p>
<b>OSD position X</b>	Setup OSD X axis
<b>OSD position Y</b>	Set up OSD y axis
<b>OSD position setup</b>	Set up OSD axis
<b>Video Preservation</b>	Setup the video preservation period. Recorded video will be deleted automatically after expiry of preservation period.
<b>Quality &amp; Frame Rate Setup</b>	Setup the quality and frame rate for each channel under normal recording and event recording type.

### 3-1.1 Quality & Frame Rate Setup



**Note :** 4CH DVR will display 4 channels and 8CH DVR will display 8 channels.

Item	Description
<b>Normal setup/ event setup</b>	Select recording mode
<b>Resolution</b>	Select recording resolution: NTSC:352x240, 704x240, 704x480 PAL:352X288,704X288,720X576
<b>Record Type</b>	You can setup quality and FPS separately for record type.
<b>No.</b>	Check/uncheck the box enable/disable selected channel recording
<b>Quality</b>	Select quality: Lowest/ Low/ Normal/ High/ Highest
<b>FPS</b>	Select recording frame rate.
<b>Auto</b>	Assign each channel with its maxima accessible fps



### 3-2 EVENT SETUP



Item	Description
<b>Motion Setup</b>	Enter to set up motion detection
<b>Sensor Setup</b>	Enter to set up sensor detection

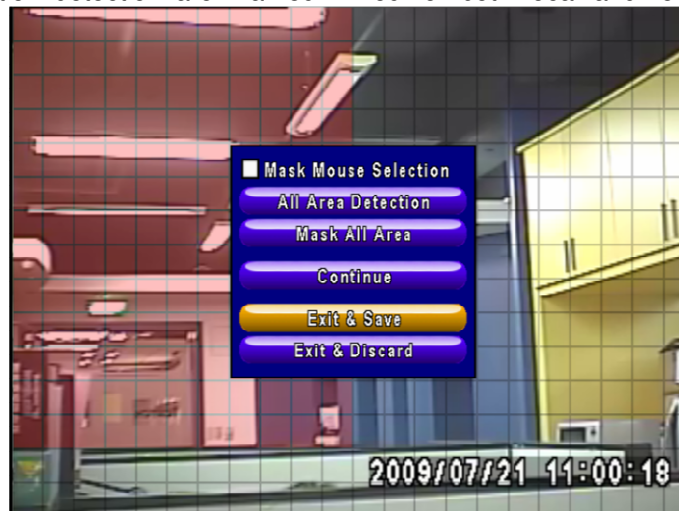
#### 3-2.1 MOTION SETUP



Item	Description
<b>Alarm Duration(Seconds)</b>	When motion detect , the number of seconds continuous alarm
<b>Motion Popup</b>	Check the box to Enable/Disable popup screen function for all channels. When motion is detected in LIVE mode, the detected channel image will pop up in full screen display.
<b>1~16</b>	You can setup independently for each channel.
<b>Enable</b>	Check the box to Enable/Disable motion detection for each channel.
<b>Sensitivity</b>	Drag the white bar or press <input type="checkbox"/> <input type="checkbox"/> to set up Sensitivity from values 1 to 10 for each channel. The lower value you set the higher sensitivity it will be
<b>Motion Area Setup</b>	Enter to setup motion detection area

### 3-2.1.1 MOTION AREA SETUP

The motion detection has been divided into 16x12 grids. The default detection area is full screen as marked in transparent for local DVR and purple for remote access. Areas deselected for motion detection are marked in red for both local and remote site.



Item	Description
<b>Mask Mouse Selection</b>	Switch between “select” and “deselect” for cursor-dragging function
<b>All Area Detection</b>	Select entire screen as detection area.
<b>Mask All Area</b>	Deselect entire detection area.
<b>Continue</b>	Continue setup
<b>Exit &amp; Save</b>	Save setup and leave
<b>Exit &amp; Discard</b>	Cancel setup and leave

### 3-2.2 SENSOR SETUP

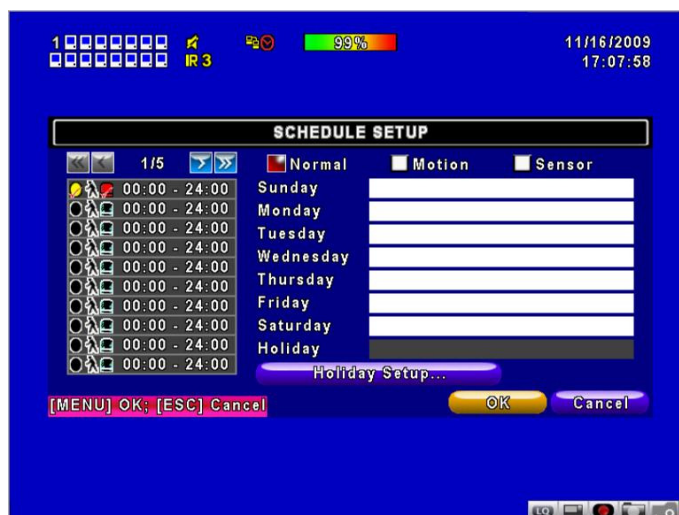


Item	Description
<b>Sensor Popup</b>	Check the box to Enable/Disable popup screen function for all channels. When Sensor is detected in LIVE mode, the detected channel image will pop up in full screen display.
<b>All Off</b>	Set all sensor off
<b>All Low</b>	Set all sensor polarity low
<b>All High</b>	Set all sensor polarity high
<b>Sensor Polarity</b>	<p>Click or press ▼ to select between HIGH, LOW voltage for triggering sensor detection or OFF to turn off polarity for each channel</p> <p><b>Low</b> Polarity : Sensor has not been triggered. When connected, sensor will be turned on.</p> <p><b>High</b> Polarity : Sensor has been triggered. When connected, sensor status will be turned off.</p> <p><b>Off</b> : Sensor is deactivated, and will not be turned on/off.</p>

**Note : 4CH DVR will display 4 channels and 8CH DVR will display 8 channels.**

### 3-3 SCHEDULE SETUP

Apart from starting the recording manually, you can also setup the system to record to pre defined schedule. This can be programmed on a daily or weekly basis using one or any combination of the three recording types available (normal, motion detection, and sensor detection).



Item	Description
<b>Page</b>	Each page provides 10 schedules for setup. 5 pages in total.
<b>Holiday Setup</b>	Enter to setup holiday, up to 50 days, other than weekends.
<b>View Event/ Motion/ Sensor Setup</b>	View Normal/ Motion / Sensor Setup

### 3-3.1 Schedule Record Setup

The recording schedule window is displayed when the time shown on the corresponding schedule is selected. You can modify the criteria for the selected recording schedule in this window. Different recording methods based on the time and/or date of the week can be selected. If you require a separate recording schedule for holidays select holidays for the date. The system can have many different schedules based on different criteria's.



### 3-3.2 Holiday Setup

Since holidays are different in each country and region, you can setup the holidays for your location accordingly.



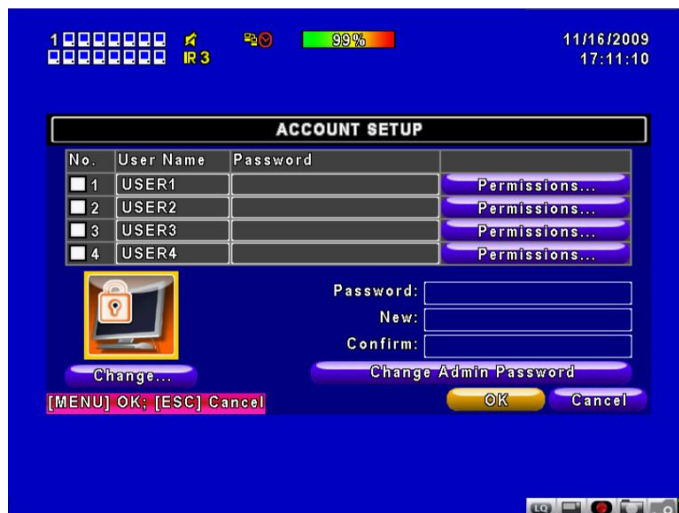
### 3-4 CAMERA SETUP



Item	Description
<b>1~16</b>	You can setup independently for each channel.
<b>Mask</b>	Check the box to Enable/Disable mask function for LIVE mode
<b>Sharpness</b>	Drag the bar or press <input type="checkbox"/> <input type="checkbox"/> to adjust Sharpness of your camera from value 1 to 255. The default value is 1.
<b>Brightness</b>	Drag the bar or press <input type="checkbox"/> <input type="checkbox"/> to adjust Brightness of your camera from value 1 to 255. The default value is 128.
<b>Contrast</b>	Drag the bar or press <input type="checkbox"/> <input type="checkbox"/> to adjust Contrast of your camera from value 1 to 255. The default value is 100.
<b>Chroma(U)/(V)</b>	Drag the bar or press <input type="checkbox"/> <input type="checkbox"/> to adjust Chroma of your camera from value 1 to 255. The default value is 128.
<b>Hue</b>	Drag the bar or press <input type="checkbox"/> <input type="checkbox"/> to adjust Hue of your camera from value 1 to 255. The default value is 128. ( <b>This function is not supported on PAL systems</b> )
<b>Name</b>	Set up name of each channel
<b>Volume</b>	Audio volume for CH1 under LIVE mode and recording mode can be adjusted.

### 3-5 ACCOUNT SETUP

The Account Setup menu is used to provide role-based permissions independently for each user (maximum of 4 users) to access the DVR over the network. The default admin account and password is “**admin**” and “**123456**” The default password remains the same after firmware upgrade, however, when changing the default password the length of the new password needs to be minimum 8-digits.



Item	Description
<b>No.</b>	Check to activate the user's account.
<b>Username</b>	Set up username
<b>Password</b>	Set up password for each user. Password is 8-digits required and can be mixed by letters and numbers with case-sensitive. Letters can be mixed with capitals or lowercases.
<b>Permissions</b>	Set up Permissions for each user
<b>Change Admin Password</b>	Change administrator's password
<b>Picture</b>	Change user's picture



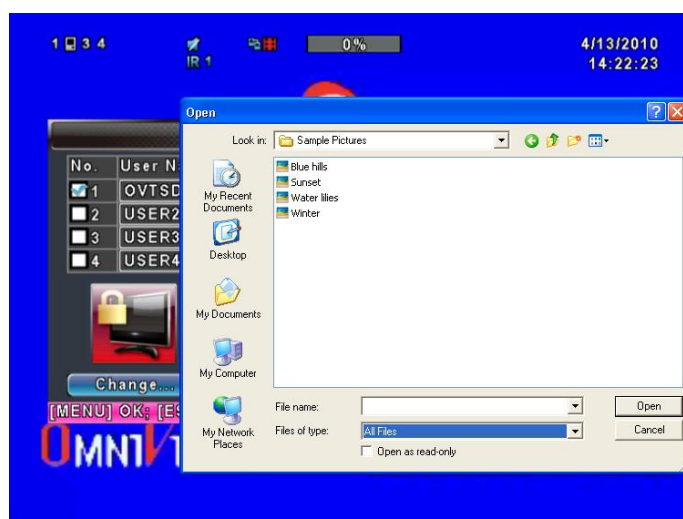
### 3-5.1 Permission Setup

In this section you can setup role-based permissions for each individual user (maximum of 4 users), including access to Setup menu, Network operation, PTZ function, Playback, Utility, Backup, Password expiry date and Mask on specific channels while playing back.



### 3-5.2 User Picture Setup

Here the user icon for the user can be changed. Select the desired picture from the HD D and select OK to change the user icon with that picture.





### 3-6 NETWORKING SETUP



Item	Description
Connect type	Setup mode for network connection: (DHCP 、 LAN 、 ADSL).
HTTP Setup	Enter to set up HTTP
DDNS Setup	Enter to set up DDNS
Mail Setup	Enter to set up mail

#### 3-6.1 NETWORKING SETUP

There are three ways to connect to the network as follows.

##### 3-6.1.1 DHCP

When DHCP is selected, IP address will be assigned by the DHCP server automatically.



### 3-6.1.2 LAN

Select LAN to assign a static IP address for the system, the following information is required.



Item	Description
<b>IP Address</b>	Enter IP address provided by ISP / Network Administrator
<b>Subnet Mask</b>	Enter IP address of Subnet Mask provided by ISP / Network Administrator
<b>Gateway</b>	Enter IP address of Gate way provided by ISP/ Network Administrator
<b>DNS</b>	Enter DNS address provided by ISP/ Network Administrator (Note: The correct DNS address must be entered for DDNS function).

### 3-6.1.3 ADSL

Select ADSL if you require the system to manage your ADSL connection, the following information is required.



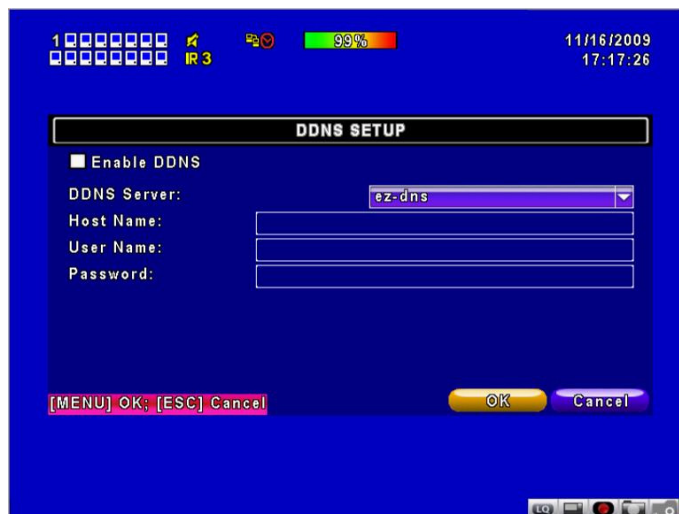
Item	Description
<b>User Name</b>	Enter user name provided by ISP
<b>Password</b>	Enter password provided by ISP

### 3-6.2 HTTP Setup



Item	Description
<b>Enable HTTP Server</b>	Check to enable HTTP server. Users can remotely access into the DVR over the network if the HTTP function is activated.
<b>Port</b>	Enter a valid port value from 1 up to 65000. The default value is 80.
<b>Auto</b>	Assign each channel with its maximum accessible fps
<b>No.</b>	Chanel number
<b>Quality</b>	Setup the transmission quality (below basic, basic, normal, high, and highest).
<b>FPS</b>	Setup transmission FPS

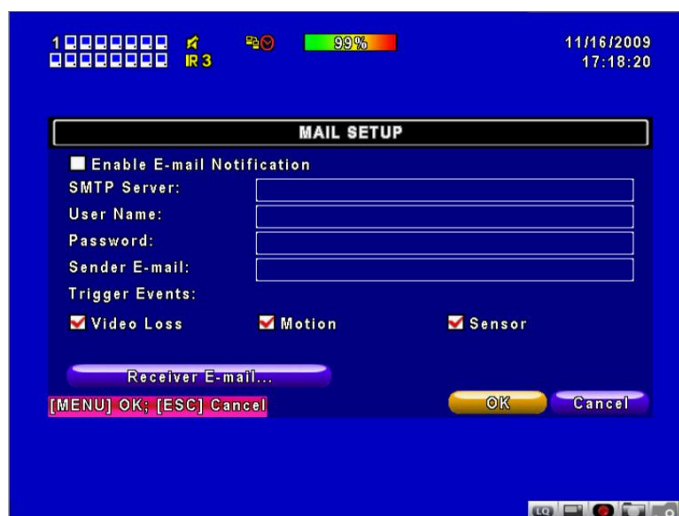
### 3-6.3 DDNS Setup



Item	Description
<b>Enable DDNS</b>	Enable/disable DDNS function.
<b>DDNS Server</b>	Select the desired DDND service provider: <b>ez-dns</b> · <b>I-DVR.NET *</b> · <b>DYNDNS.ORG</b> · <b>NO-IP.ORG</b> · <b>3322.ORG</b>
<b>SMTP Server</b>	Enter the registered host name.
<b>User Name</b>	Enter user name.
<b>Password</b>	Enter password.

### 3-6.4 Mail Setup

When an event occurs (VLOSS, MOTION, SENSOR) an email can be sent to an email address or a group of email addresses automatically.





Item	Description
<b>Enable E-mail Notification</b>	Check the box to enable/disable E-mail Notification function.
<b>SMTP Server</b>	Enter to set up SMTP Server name. (Varies according to the user)
<b>User Name</b>	Enter the User Name for the SMTP server.
<b>Password</b>	Enter the Password for the SMTP server.
<b>Sender E-mail</b>	Enter to set up e-mail address of receivers.
<b>Trigger Event</b>	Select the events you need the send out E-mail notifications sent for (Motion, Sensor and Vloss - Video Loss).
<b>Receiver E-mail</b>	Set up e-mail addresses for up to 10 receivers individually.

### 3-7 PTZ & RS485 SETUP

The DVR allows users to control the PTZ cameras attached to the system. To enable this function, a RS-485 cable should be connected to the RS-485 port of the DVR.



Item	Description
<b>Enable PTZ</b>	Click the box to Enable/Disable PTZ function for each channel.
<b>Protocol</b>	Set up the protocol of PTZ cam. The supported protocols are <b>PELCO-P, PELCO-D, KND, LI-LIN, SAMSUNG, LG, AVTECH.</b>
<b>PTZ ID</b>	Click or press <input type="checkbox"/> <input type="checkbox"/> to set up PTZ ID. The valid ID value is from 1 to 64.
<b>Baud Rate</b>	Select Baud Rate for PTZ from 2400, 4800, 9600, 19200
<b>RS-485 ID</b>	Select RS-485 ID from 1 to 64
<b>RS-485 Baud Rate</b>	Select RS-485 Baud Rate from 2400, 4800, 9600, 19200
<b>Keyboard</b>	Select Keyboard. (Li-Lin)

**Note : 4CH DVR will display 4 channels and 8CH DVR will display 8 channels.**

### 3-8 SYSTEM SETUP



Item	Description
<b>DVR Name</b>	The name of DVR will be shown when users login from remote access.
<b>DVR Location</b>	The location of DVR will be shown when users login from remote access
<b>Language</b>	Click or press ▼ to select OSD language from English, Traditional Chinese, Simplified Chinese, Japanese, Greek, Portuguese
<b>Remote ID</b>	Default ID is 1. When DVR is controlled by a standard remote control, please press "DVR1 * " before using it. When more than one DVRs are in the same location, the DVRs can be numbered from 1 to 4. The corresponding DVR number needs to be selected from the remote to control that system.
<b>Display Setup</b>	Enter to set up Display
<b>Date/Time Setup</b>	Enter to set up Date/Time
<b>Device Setup</b>	Enter to set up Buzzer & Relay

<b>Spot Setup</b>	Enter to set up the Spot monitor
-------------------	----------------------------------

\* Default ID is ID1. If remote control malfunctions, please press, “DVR1” button to renew corresponding DVR ID.

### 3-8.1 DISPLAY SETUP



Item	Description
<b>Auto-Seq Interval</b>	Set up duration time in seconds for the interval between channels under Auto-Seq mode.
<b>Show OSD</b>	Turn On / Off OSD display
<b>Show DVR Status</b>	Turn On / Off DVR illustration and record status display
<b>Show Date/Time</b>	Turn On / Off date and time display
<b>Show Channel Name</b>	Turn On / Off channel name display
<b>CRT</b>	Deflicker(only for CRT monitor)
<b>Border Color</b>	Set up the color of border in LIVE , PLAYBACK mode. ( Red, Green, Blue )

### 3-8.2 DATE/TIME SETUP



Item	Description
Hour Format	12HOURS/ 24HOURS
Date Format	MM-DD-YY/DD-MM-YY/YY-MM-DD
Date/Time Position	Choose the position of Time and Date display
Change Date & Time	Setup time and date of DVR
Time Zone Setup	Set up GMT and Daylight Saving Time.
Internet Time Setup	Setup automatic synchronization with internet time server

#### 3-8.2.1 CHANGE DATE & TIME

Setup date and time of the DVR manually according to user's local time.





### 3-8.2.2 TIME ZONE AND DAYLIGHT SAVING TIME SETUP

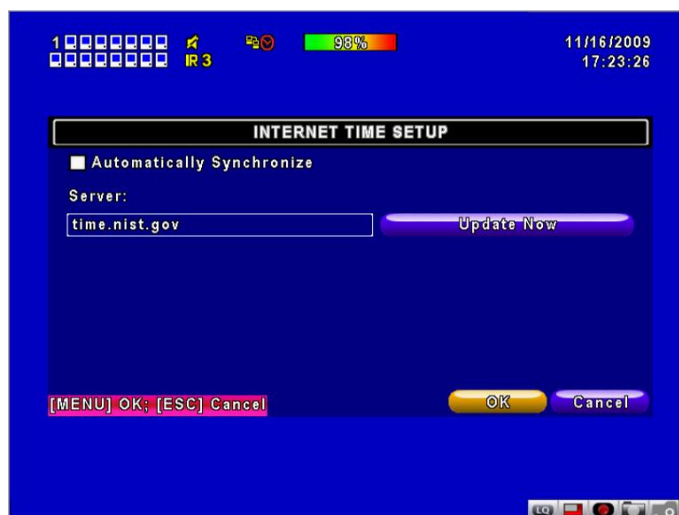
Set up time zone and activate Daylight Saving Time function according to user's DVR location.



Item	Description
Select Time Zone	Enter to modify GMT from GMT- 13 to GMT+ 13
Daylight Saving Time	Turn on/ off Daylight Saving Time

### 3-8.2.3 INTERNET TIME SETUP

Synchronize your DVR time with internet time server.



Item	Description
Automatic Synchronization	Tick to enable DVR automatic synchronization function. When this option is selected, DVR will automatically synchronize the time upon rebooting or by every 24 hours after booting.

<b>Update Now</b>	Immediately updates the date and the time with the NTP server.
-------------------	--

### 3-8.3 BUZZER & RELAY SETUP



Item	Description
<b>Key Tone</b>	Enable/Disable keystrokes.
<b>Buzzer</b>	Enable/Disable buzzer operation when the alarm is triggered for sensor, motion and vloss (Video Loss).
<b>Relay</b>	Enable/Disable the signal to be sent to the RELAY OUT blocks when the alarm is triggered for sensor, motion and vloss.

### 3-8.4 SPOT SETUP



The DVR has one BNC video output port which can be configured as the main monitor or the spot monitor. When the SPOT mode is not enabled the video output port can be used to output the main monitor image. To enable the SPOT monitor tick the “Enable Spot” tick box in the spot setup and restart the DVR. SPOT setup is for controlling the order of channels the system cycles through in SPOT mode. User can monitor every channel in the SPOT mode.

Item	Description
<b>Interval (Seconds)</b>	The duration time in seconds for the interval between channels under SPOT mode.
<b>Skip Video Loss Channel</b>	Whether to skip channels without video signal.

### 3-9 UTILITY SETUP



Item	Description
<b>HDD Initialization</b>	Select to enter the hard disk initialization menu. <b>Please stop recording before entering this menu.</b> When you enter the menu, system will show all the data (model, volume) of HDD that is installed in the DVR. Check the HDD you'd like to initialize and then press "Start". HDD initialization is successful when the status shows "Succeed"
<b>USB Initialization</b>	Clean up all data on USB. Enter USB initialization and press YES to clean up all data on your USB. The initialization is done when it's showed "Succeed".
<b>System Recovery</b>	Restore system default values
<b>Reset System Events</b>	Reset all the recording events in DVR.
<b>Copy Setup to USB</b>	Copy configuration to a USB device. There will be a file named 「sdvr_conf.dat」 on your USB.
<b>Download Setup from USB</b>	Upload the saved configuration from a USB device into the DVR.
<b>Upgrade</b>	Upgrade DVR through USB. Please stop recording and backup setup configuration before upgrading. <b>System will reboot automatically when the upgrade is completed.</b>

**Notice! DO NOT TURN OFF POWER OR UNPLUG USB DEVICE DURING THE UPGRADE as it may cause incomplete firmware upgrade and damage to the DVR.**

### 3-10 DIAGNOSTIC

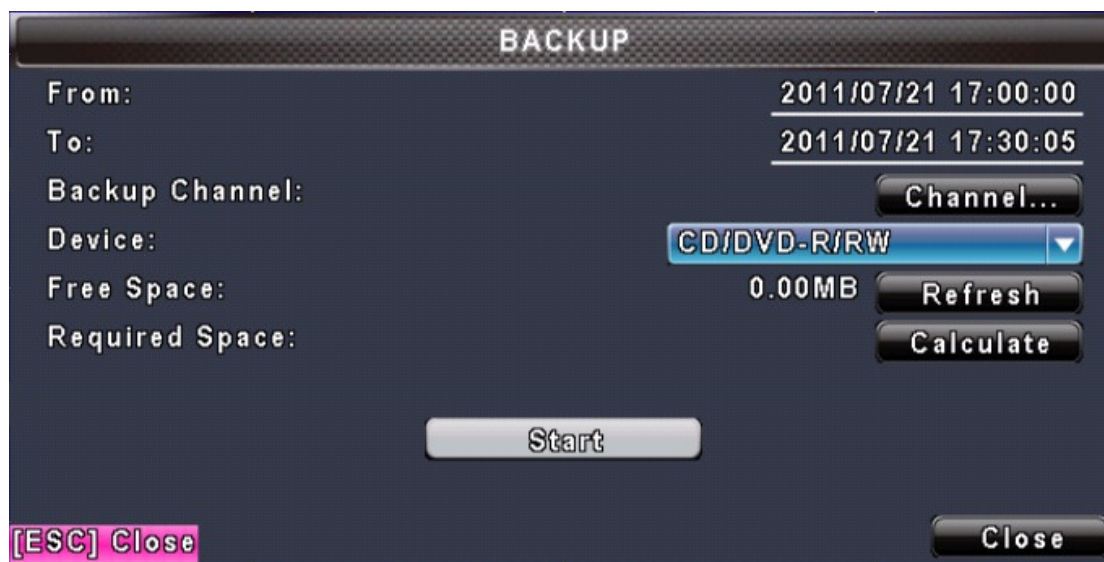


Item		Description
Version		The current firmware version of DVR
IP		The connected IP address of DVR. If disconnected from network, the screen will display" NETWORK DISCONNECT".
MAC		MAC Address of DVR
HDD Status	No.	HDD number
	Volume	HDD Capacity
	Used Rate	Percentage of space used on HDD.
	Status	Shows HDD status. <b>USING</b> means the HDD is being used for recording now <b>GOOD/BAD</b> means the HDD has a known/unknown format for the DVR. (Note: Please initialize your newly-installed HDD before using it.)
	Format Time	The latest format time of HDD

## CHAPTER 4 BACKUP & SEARCH

### 4-1 BACKUP MENU

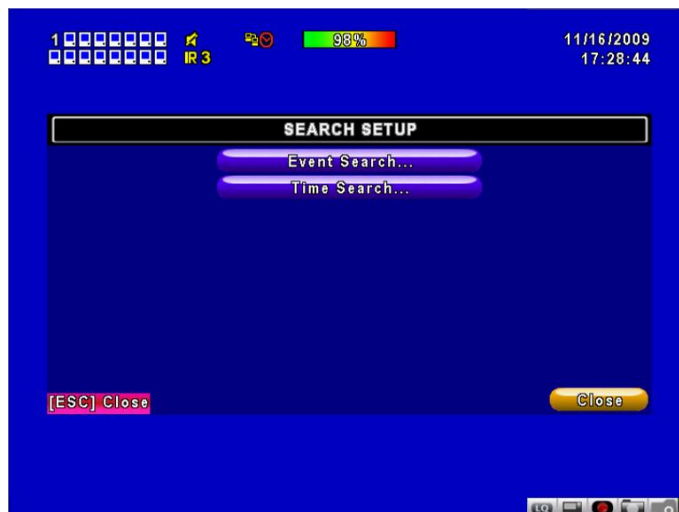
User can backup any segment of the recorded data stored on the system. To do so, either a CD/DVD or storage device, like USB, must be connected to the DVR. Recorded data can also be backed up into a remote PC through our remote access software: 「DVRRemoteDesktop.exe」 and be saved in your assigned path. The format of backup file is *IRF* (proprietary) which can be played by using “iFilePlaypack”, “DVRRemoteDesktop.exe” or “CMS”.



Item	Description
<b>From</b>	The start time of backup file
<b>To</b>	The end time of backup file
<b>Backup Channel</b>	Select the channel/s (camera/s) you want to backup
<b>Device</b>	Select USB, CD/DVD /RW or PC as the backup device
<b>Free Space</b>	The available space in your backup device. (not available for PC backup)
<b>Refresh</b>	Recalculate the available space of backup device. (not available for PC backup)
<b>Required Space</b>	Show the size of the backup file
<b>Calculate</b>	Calculate the size of backup file
<b>Start</b>	Start backup operation. <b>Be sure to calculate the size of backup file BEFORE starting the backup.</b>

**Note!** Do not unplug the USB device or turn off the DVR during the backup process to avoid unrecoverable errors.


## 4-2 SEARCH MENU



Item	Description
Event Search	Event search menu
Time Search	Enter time search menu

### 4-2.1 EVENT SEARCH



The DVR maintains a log based on all the activities which occur. Each record in the log includes events type, time and channel information. If a recording for a specific event is stored in the system, a yellow signal  will be shown on to the left side of time information. Rest your cursor under the line and press “enter”, or left click your mouse to playback the recording data.

**P.S. Event Records will still be generated even when a hard disk is not installed or the record function is not activated. However, the recordings can't be viewed when opted to do so.**

Item	Description
<b>Criteria</b>	Setup conditions of event search
<b>Page</b>	Switch between pages of events
<b>Date/Time</b>	Date/time when event occurred.
<b>Event Type</b>	Event type, defined as following
	<b>MOTION</b> Motion Detected
	<b>SENSOR</b> Sensor Detected
	<b>Video Loss</b> Video Loss
	<b>Remote Login</b> user log-in over the network
	<b>Remote Logout</b> user log-out over the network
	<b>Power On</b> DVR Power on
	<b>HDD Full</b> HDD Space FULL
	<b>HDD Error</b> Detect HDD error
	<b>Reboot</b> DVR Reboot
<b>Info</b>	The channel where event occurs or login user

#### 4-2.1.1 CRITERIA SETUP FOR EVENT SEARCH


The amount of events stored on the system can be large. Therefore, you can facilitate event sorting by setting up "criteria". Setup "start time" and "end time" for event search, then the search result will be limited to this specific period of time. Only checked events and channels will be shown in event search.



**Note : 4CH DVR will display 4 channels and 8CH DVR will display 8 channels.**

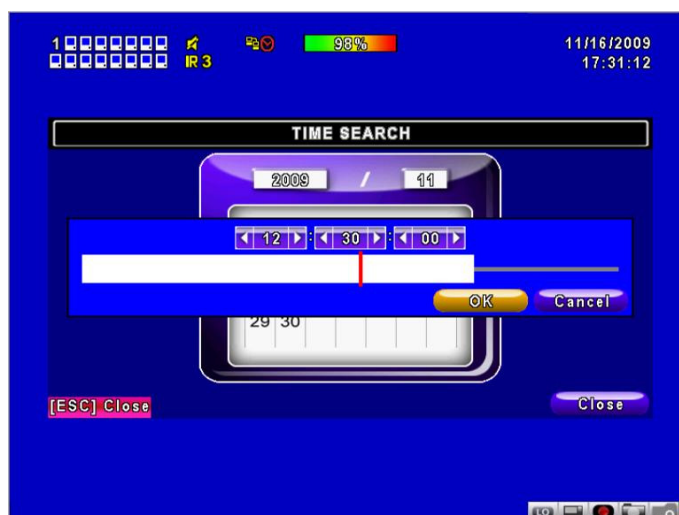


## 4-2.2 TIME SEARCH

TIME SEARCH can be used to playback recordings from a given time. Press “Enter” or left click on the desired date to playback (Note that dates for which the system has got stored data are marked with a red square “”). System will start playing back according for the date you selected. The calendar will be shown by using mouse to click on “year” and “month”.



Select the “date” to display recording times for that specific date with a time bar. You can change time (hour/minute/second) or select a specific time on the time bar by mouse clicking on the time bar, and then press “ok”. DVR will playback the selected recording data.



## CHAPTER 5 Remote Software Installation and Setup

### 5-1 Installing and using the remote desktop client

Remote Desktop Client software: 「DVR Remote Desktop.exe」 allows you to remotely access and control the DVR from a remote PC.

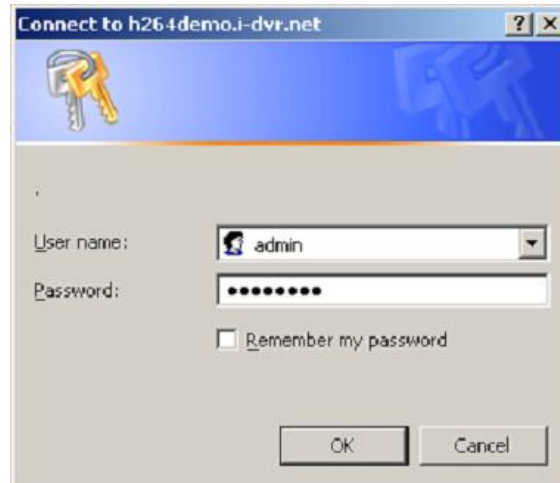
**p.s. Operating systems currently supported includes Windows XP SP2 and above Windows Vista and Windows 7**

To install the Remote Desktop application please follow the following guidelines.

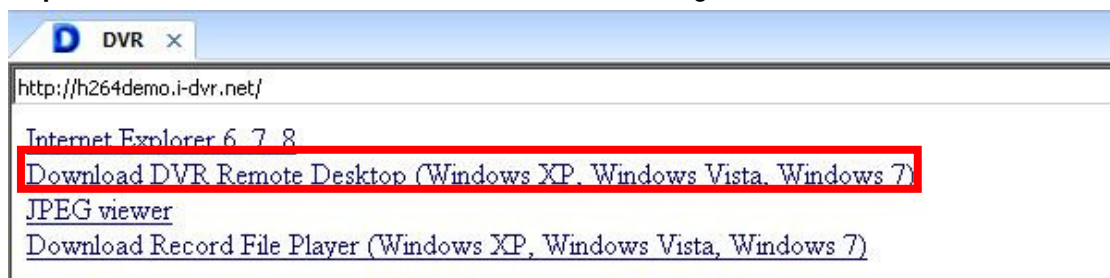
**Step One :** Enter the IP address of DVR in a web browser. **The address appeared in this image is only for demonstration. The actual address varies on the setup of on-site DVR.**



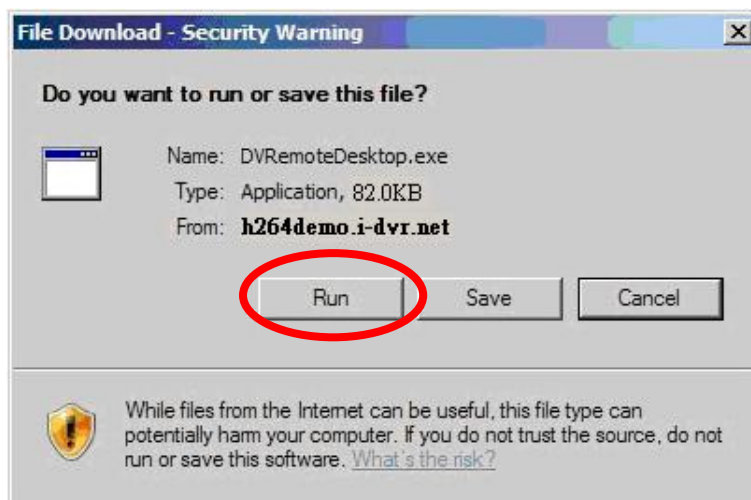
**Step Two:** The system authentication window will be displayed. Please enter the user name and password for the system. Default user name and password is **admin/123456**. For information about setting up user accounts and passwords, please refer to “**3-5 Account Setup.**”



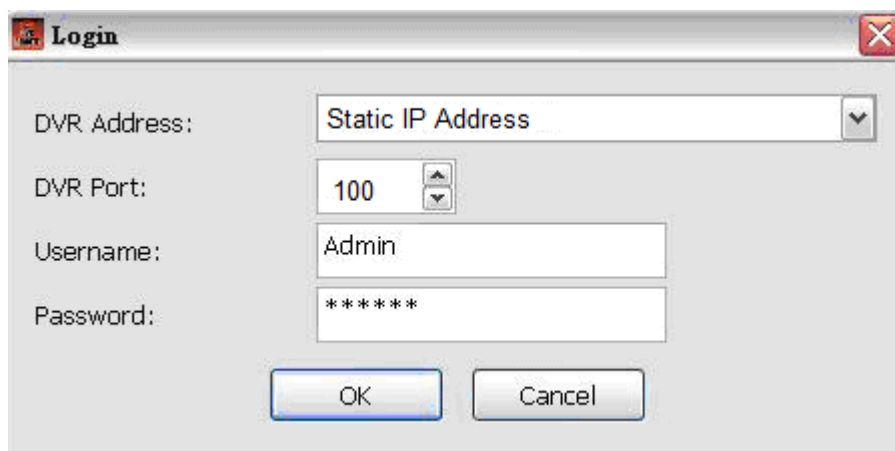
**Step Three:** Click on the download link to start downloading the AP software.



**Step Four:** Run or Save the Desktop Application in to the remote PC.



**Step Five:** If you choose to run the software, a login window will be displayed. Please enter the information required (IP, Port, Username and Password) or choose "Play Recorded File" to open backup files in your PC.



**Step Six:** Select OK and you will be logged into the system if authorized.



**Note :** 4CH DVR will display 4 channels and 8CH DVR will display 8 channels 16CH DVR will display 16 channels.

## 5-2 Remote monitoring through IE

You can use IE to remotely login to the system with out the using the Remote Desktop Application. Do the following to remotely access the system using IE. **Currently this method is only supported in IE only.**

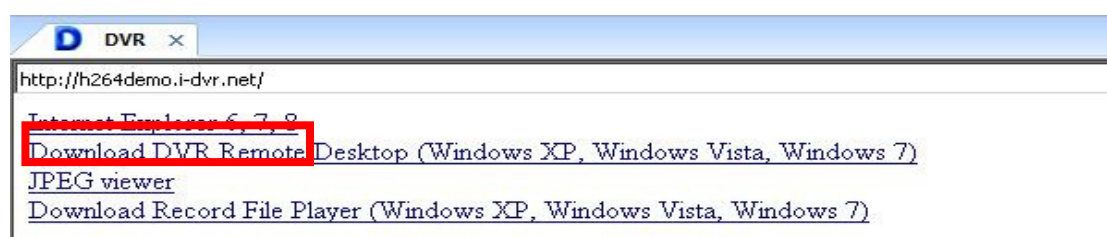
**Step One :** Enter the IP address of DVR in IE browser. The address appeared in this image is only for demonstration. The actual address varies on the setup of on-site DVR.



**Step Two:** The system authentication window will be displayed. Please enter the user name and password for the system. Default user name and password is **admin/123456**. For information about setting up user accounts and passwords, please refer to “3-5 Account Setup.”



**Step Three:** Click on “Internet Explorer 6, 7, and 8” login to the system using IE.



When accessing the system for the first time using IE a security warning will be displayed seeking authority to install an ActiveX component. Please refer to Appendix I for Remote Monitoring IE ActiveX Control Installation Instruction.



**Step Four:** DVR images appear.



**Note :** 4CH DVR will display 4 channels and 8CH DVR will display 8 channels.

### 5-3 Remote Desktop Software Operation

Open the file “DVRemoteDesktop.exe”; enter the information of the DVR (“IP address”, “Port” “Username” and “Password”) and click “OK”. You should be able to login to the DVR successfully and start using the remote desktop software. The default username and password is “admin / 123456”

“DVRemoteDesktop.exe” AP software provides some extra functions for remote users. Please check **Table 5-3.1** for minimum system requirements for “DVRemoteDesktop.exe” operation.

**Table 5-3.1** System Requirements for AP software

CPU	Intel Pentium 4 above
OS	Microsoft Windows 7 、 Windows Vista 、 Windows XP SP2 above
RAM	512M above
VGA Card	Needed to support DirectX9.0 (Above) <b>Note 1</b>
Others	DirectX 9.0 above

**Note 1:**

Known VGA cards that support DirectX9.0 currently:

**NVIDIA:** Geforce FXseries, Geforce 6series, Geforce 7series, Geforce 8series, Geforce 9series, Geforce 200series, etc.

Or

visit:

[http://en.wikipedia.org/wiki/Comparison\\_of\\_Nvidia\\_graphics\\_processing\\_units](http://en.wikipedia.org/wiki/Comparison_of_Nvidia_graphics_processing_units)

**ATI:** Radeon R300series, Radeon R400series, Radeon R500series, Radeon R600series, Radeon R700series, Radeon HD 3xxx IGPseries, Mobility Radeon series (9500 above), Mobility Radeon Xseries, Mobility Radeon HD series, or FireGL V series etc.  
Or visit: [http://en.wikipedia.org/wiki/Comparison\\_of\\_ATI\\_graphics\\_processing\\_units](http://en.wikipedia.org/wiki/Comparison_of_ATI_graphics_processing_units)

**SiS:** SiS 67Xseries, or SiS 77Xseries etc.

Or visit: [http://www.sis.com/support/support\\_compare.htm](http://www.sis.com/support/support_compare.htm)

**Intel:** 91Xseries, 94Xseries, 96Xseries, G3Xseries, or G4Xseries, etc.

Or visit: [http://en.wikipedia.org/wiki/Intel\\_GMA](http://en.wikipedia.org/wiki/Intel_GMA)

## CHAPTER 6 SPECIFICATIONS

Model			OVR-4100S	OVR-8100S	OVR-6100SN
Camera Input			4 CH	8 CH	16 CH
Video	HDMI		1 (Option) (Video Output [1280x1024] + Audio Output)	1 (Option) (Video Output [1280x1024] + Audio Output)	1 (Option) (Video Output [1280x1024] + Audio Output)
	Input		4	8	16
	Output		1VGA (1280x1024) + 1BNC for CO-Monitor / 1VGA (1280x1024) + 1BNC for SPOT Monitor.		
Audio	Input		4 RCA	4 RCA	16 RCA
	Output		2 RCA	2 RCA	2 RCA
System	Operating System		Embedded Linux OS		
	Internal HDD		Supports Max. x 2 SATA Devices (HDDx2, HDDx1+DVDx1 or HDDx1+ e-SATA x 1)	Supports Max. x 2 SATA Devices (HDDx2, HDDx1+DVDx1 or HDDx1+ e-SATA x 1)	Supports Max. x 4 SATA Devices (HDDx2+DVDx1+ e-SATA x 1)
	External HDD		Option	Option	1 x e-SATA
	Sensor In (NO, NC) Relay out		Sensor-in x4 Relay-out x1	Sensor-in x8 Relay-out x1	Sensor-in x16 Relay-out x2
	Serial Interface		RS-485		
	USB		2 x USB2.0		
	Dimension ( mm )		430(w)x55(h)x293(d)	430(w)x55(h)x293(d)	430(w)x55(h)x293(d)
	Weight ( w/o HDD /DVD±RW )		1.8KG	1.85KG	1.85KG
	Adaptor		Input 100~240V, Output 12V 5A	Input 100~240V, Output 12V 5A	Input 100~240V, Output 12V 6A
	Power Source		60W	60W	72W
	Display	Speed		120 fps	240 fps
Resolution (Pixel)		720 X 480(NTSC), 720 X 576(PAL)			
Split screen		1,4, SEQ.	1,4,8, SEQ.	1,4,9,13,16 SEQ.	
Auto Channel Switching		Switching time : 1 ~ 999 sec			
Mode		Zoom ( Digital x2~ x8 ), PIP, Auto SEQ.			
Recording	Compression		H.264 ASP (Internet Transmission: H.264)		
	Dual Stream Resolution (Pixel)	Main (Recording)	704 X 480, 704 X 240, 352 X 240 (NTSC) / 704 X 576, 704 X 288, 352 X 288 (PAL)		
		Sub (Network)	352 x 240 (NTSC), 352 x 288 (PAL)		
	Picture quality		5 levels (Highest, High, Normal, Basic, Below Basic)		



	Mode		Manual, Motion, Sensor, Schedule		Manual, Motion, Sensor, Schedule	
	Speed	NTSC	D1 120 fps(704 x 480) HD1 120 fps(704 x 240) CIF 120 fps(352 x 240)	D1 120 fps(704 x 480) HD1 240 fps(704 x 240) CIF 240 fps(352 x 240)	D1 120 fps(704 x 480) HD1 240 fps(704 x 240) CIF 480 fps(352 x 240)	
		PAL	D1 100 fps(704 x 576) HD1 100 fps(704 x 288) CIF 100 fps(352 x 288)	D1 100 fps(704 x 480) HD1 200 fps(704 x 240) CIF 200 fps(352 x 240)	D1 100 fps(704 x 576) HD1 200 fps(704 x 288) CIF 400 fps(352 x 288)	
	Pre-Alarm		10 SEC			
	Post-Alarm		1 ~ 60 SEC			
	Water Mark		YES			
	Playback	Display		1, 4	1, 4, 8	1, 4, 8, 16
Search mode		Date, time, event( Motion, Sensor ), camera	Date, time, event( Motion, Sensor ), camera			
Zoom		Digital ( x2 ~ x8 )				
Snapshot		YES				
Speed		Normal, REW & FF (recorded speed x2, x4, x8, x16, x32, x64), Frame by frame, Pause				
Device		Int. HDD				
Network	Network Interface		10/100 Ethernet			
	Protocol		TCP/IP, SMTP, HTTP, DHCP, PPPoE(ADSL - Limited), NTP			
	Application		Windows XP/VISTA/7(PC Client system)			
	Remote Software		Licensed Application Software, IE Browser			
	Account		1 Admin + 4 users			
	CMS		Unlimited (Depends on bandwidth)			
	3G / GPRS		Symbian, Windows Mobile, Blackberry, iPhone, Android phone			
	Event Transport		E-mail			
Backup	Interface		USB 2.0 or SATA			
	Audio Backup		YES			
	Network		YES			
	Backup Device		Network Backup / USB Flash Drive / USB DVD±RW (Not Supplied) / SATA DVD±RW (Optional)	Network Backup / USB Flash Drive / USB DVD±RW (Not Supplied)/ SATA DVD±RW		
Alarm	Motion Detection		Detected Frames: Unlimited / Channel			
			Sensitivity : 10 levels for each channel			
			Area : Programmable individually			



	<b>Alarm Hold Time</b>	1 ~ 60 SEC	
	<b>Search ( Event Criterion )</b>	YES	
	<b>Event Log</b>	Up to the 10000 events (Sensor, Motion, video Loss, power on, remote login, logout, HDD error, HDD full)	
<b>OSD &amp; DVR Control</b>	<b>GUI</b>	16-bit True Color	
	<b>Multi-Language</b>	English, Traditional Chinese, Others	
	<b>Camera Title</b>	Multi-Language	
	<b>USB Mouse</b>	YES	
	<b>Touch Panel</b>	Touch Panel LCD Monitor (USB Interface, EETI Chipset Only)	
	<b>Remote Controller</b>	IR Remote Control ( Max. 1 Device)	IR Remote Control ( Max. 4 Device)
	<b>System Upgrade</b>	via USB / Network	
	<b>Hard Key</b>	Front Panel	
	<b>Pan/Tilt/Zoom Control</b>	Control From RS485 Interface ( Pelco P, Pelco D, Samsung, LG, LiLin )	

Table 6-1

## CHAPTER 7 MOBILE APPLICATION INSTALLATION AND USAGE

You can remotely monitor all channels of the DVR through your mobile device. The required mobile application for your mobile devices operating system can be found on the user manual CD or by contacting Omnivision Technical services. Currently applications are available for Windows mobile 5.0 and above, Symbian OS, iPhone and Android based devices.

Please confirm network function of DVR has been activated before for the mobile application to communicate with the system:

Main menu → Network Setup → HTTP Setup → Check the “Enable HTTP Server”

### 7-1 Mobile Application Installation and Operation for Symbian System

Mobile Device: Nokia, Sony Ericsson...etc.

System requirement:

GPRS/ 3G data service must be enabled by your network provider.

Mobile device that supports GPRS/ 3G protocol and Java cldc1.0/midp 2.0 environment

**\*Please download both “DVRH264.jar” and “DVRH264.jad” to operate the function.  
Note that users with Sony Ericsson will only need to download “DVRH264.jar.”**

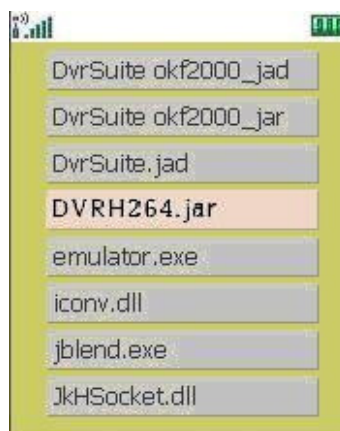
#### 7-1.1 Java Mobile Application Installation

Please follow the following steps to install the mobile application in you mobile device.

Step 1: The mobile application called “**DVRH264.jar**” needs to be installed in your mobile device.

The application can be transferred to your mobile device from the User Manual CD (that is packed with DVR) by using the Bluetooth link or USB cable.

Step 2: Install the application software “**DVRH264.jar**” in your mobile device. It might be installed automatically after downloading; otherwise, execute the downloaded transferred file.



### 7-1.2 Mobile Application Operation

After the installation, enter the Program Files menu in your mobile device to run the application “DVRH264”.

Select “Menu” at the bottom right hand corner of your mobile screen, 4 commands, **Login Add Modify** and **Delete**, will show up.

#### 7-1.2.1 Add New Login DVR

To log into the DVR, you need to enter the logging-in information for the DVR. Find “**Add**” under the “Menu” then enter DVR’s IP address, Port number, account name and password. Press “**Add**” to save this information after entering.

#### 7-1.2.2 Logging Onto the DVR

Use the Login command to log onto a DVR and monitor live images. If multiple DVRs have been added to the mobile application, they will be listed by name, you can select one to log onto.

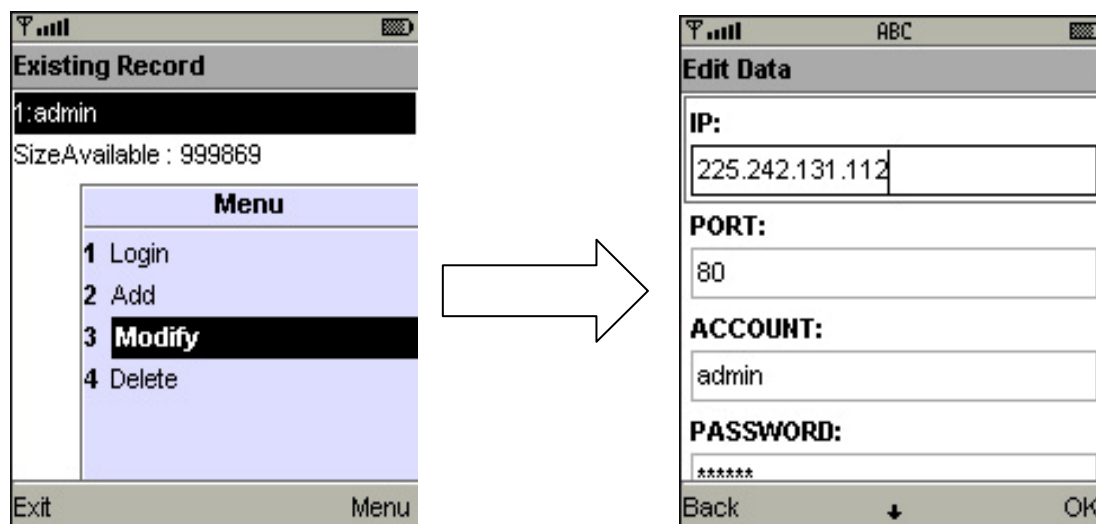
A confirmation message might show up for network charge before connection (your may be charged by your network provider for the data usage).

Network connectivity will take some time. It'll be affected by networking environment and bandwidth flow.  
Live image will show up after a successful connection.

**PS. Live images can not be displayed in your mobile when the recoding is turned off in the local DVR.**

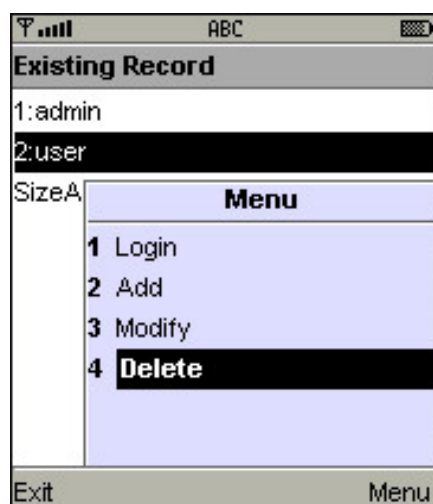
### 7-1.2.3 Modify the Login Information of DVR

You can use the “**Modify**” command to change the login information for a DVR. The steps are identical to that of the “Add” command.



### 7-1.2.4 Delete the Login Information of DVR

“**Delete**” command can be used to remove the DVR information if it is no longer useful. Select the DVR on the name list then choose “**Delete**”



## 7-1.3 Live Monitoring Operation

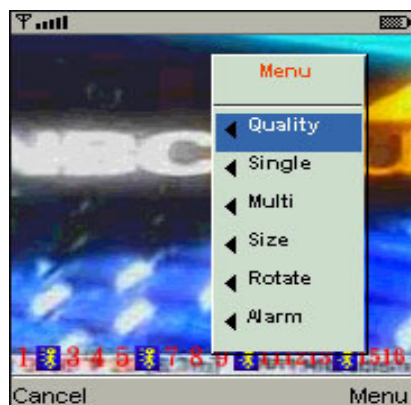
This paragraph describes operations under the LIVE monitoring mode in your mobile device.

### 7-1.3.1 Scroll the Image

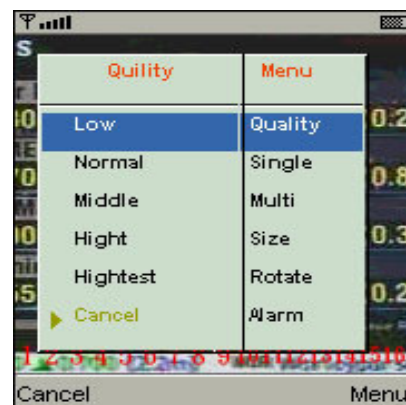
You can use the keypad on your mobile device to scroll the image if it's oversized.

Key	Action
2	Scroll Up
4	Scroll Left
6	Scroll Right
8	Scroll Down

### 7-1.3.2 Image Quality Setup



Select **"Quality"** under the **"Menu"**



There will be 5 levels for you to choose: **Low** 、**Normal** 、**Middle** 、**High** and **Highest**.

### 7-1.3.3 Channel Display



Select **"Single"** in the **"Menu"**, all the channels of your DVR will be displayed in the menu.



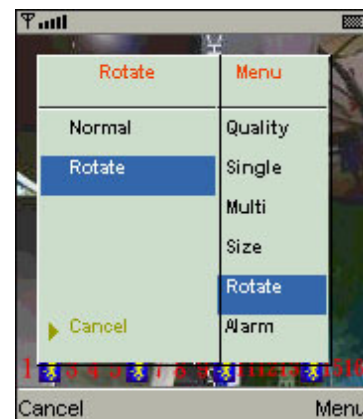
### 7-1.3.4 Size of Image

The screen size varies from mobile to mobile. You can select **"Size"** under the **"Menu"** to choose from **"Original"** or **"Fit Screen"** to resize the displayed image.

Item	Description
Original	The image will be shown in original size.
Fit Screen	The image will be shown to fit the screen.

### 7-1.3.5 Rotate the image

The Live image can be displayed in normal or rotate 90 degrees. Select **"Rotate"** under the **"Menu"** for this operation.



### 7-1.3.6 Alarm

This application not only allows you to remotely monitor through your mobile device but allows you to receive alarm that has been triggered by events such as Motion Detected, Sensor Triggered and Video loss.

Graphical icons below will be shown on the status:



: Motion detected



: Sensor triggered



: Video loss

Select the **"Alarm"** under the **"Menu"** to switch this function on or off.



## 7-2 Mobile Application Installation and Operation for Windows Mobile System

Windows mobile application “h264pocket” can be transferred to your mobile using a Bluetooth connection or by using the USB cable.

### System Requirements:

Mobile device OS : Windows mobile system 5.0 above

Mobile device needs to have an active data connection such as GPRS / 3G / Wi-Fi... etc.

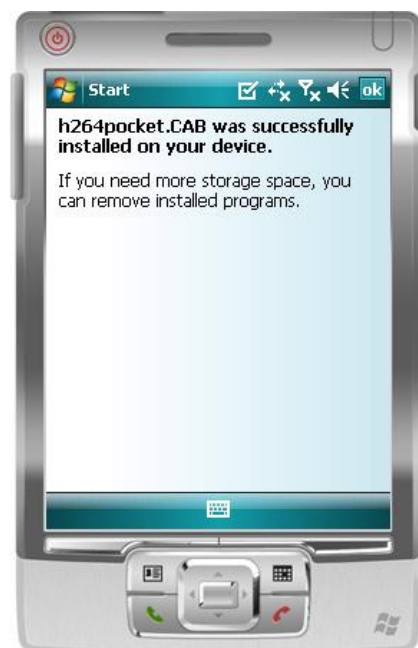
### 7-2.1 Mobile Application Installation

Please follow the following steps to install the mobile application in your windows mobile devise.

Step 1: The mobile application “**H264Pocket.CAB**” needs to be installed in your mobile device. The application can be transferred to your mobile device from the User Manual CD (that packed with the DVR) by using a Bluetooth link or USB cable.



Step 2: Install the application software “**H264Pocket.CAB**” in to your mobile device.





### 7-2.2 Mobile Application Operation

After the installation, enter the start menu your mobile device and select “H264Pocket” to run the mobile application.



This application allows you to remotely logon and monitor DVR. Press “OK” to bring up the operations menu, refer to the following table for further description of the factions.










Item	Function	Description
Add	Add a DVR	Enter DVR’s name, IP address, Port, User name, Password then press “OK”
Login	Login to a DVR	<ul style="list-style-type: none"> <li>Choose the DVR that you’d like to log on , then press “OK”</li> <li><b>PS. Live images can not be displayed in your mobile when recoding is turned off in the system.</b></li> <li><b>PS. Network connectivity will be affected by networking environment and bandwidth flow. Your network provider may charge for the data usage.</b></li> </ul>
Modify	Modify DVR Login Information	Choose the DVR for which the login information needs to be modified the press “ <b>Modify</b> ”, press “OK” when finished modifying to save changes.
Delete	Delete DVR Login Information	Choose DVR and press “ <b>Delete</b> ” to delete the DVR info.



### 7-2.3 Using the mobile application

After successfully logging in to the DVR, press “View” to bring up the operations menu. You can select the channel, turn on/off the status bar, receive alarms and make the screen display full screen using this application. Refer to the following table for a detailed description of the application functions.



Item	Function	Description								
Channel 1~16	Display for CH 1~16	Choose from CH1~16 to display. (Only 1CH can be shown at a time)								
Status Bar	Status Bar	<p>Graphical icons indicated below will be shown on the status bar if there is an event such as motion detection, sensor triggered and video loss is detected on any channel. You can also uncheck the “<b>Status Bar</b>” to inactivate this function.</p> <table><tr><th>Icon</th><th>Description</th></tr><tr><td></td><td>Motion Detect</td></tr><tr><td></td><td>Sensor Trigger</td></tr><tr><td></td><td>Video Loss</td></tr></table>	Icon	Description		Motion Detect		Sensor Trigger		Video Loss
Icon	Description									
	Motion Detect									
	Sensor Trigger									
	Video Loss									
Alarm	Alarm	Alarm through your mobile device can be triggered if there is event to be detected. You can also uncheck the “ <b>Alarm</b> ” under the “View” to inactivate this function.								
Sound	Sound	If the channel video with sound input, turn this option to hear the real sound .								
Full Screen	Full screen display	You can choose one channel to display in full screen by check this function.								

### **7-3 Mobile Application Installation and Operation for Blackberry System**

#### System requirements :

Mobile Device operation platform : Blackberry 9000

Mobile device needs to have an active data connection such as Blackberry data pack or GPRS / 3G / Wi-Fi... etc.

#### **7-3.1 Software installation**

Follow the following instructions to install the mobile application in your Blackberry Device.

Step 1: Visit Blackberry official website

<http://na.blackberry.com/eng/services/desktop/> [www.blackberry.com](http://www.blackberry.com).

Download the latest version of Blackberry Desktop Manager and install it in your PC

Step 2: Connect Blackberry USB transmission cable to Blackberry and PC. Activate Blackberry Desktop Manager on PC and it will automatically connect to Blackberry momentarily.



## Step 3 : Execute "Application Loader"



## Step 4: Execute "Add/Remove Applications"



Step 5: Copy "codename.alx" and "codname.cod" which can be found on the User Manual CD (packed with the DVR) to the PC.



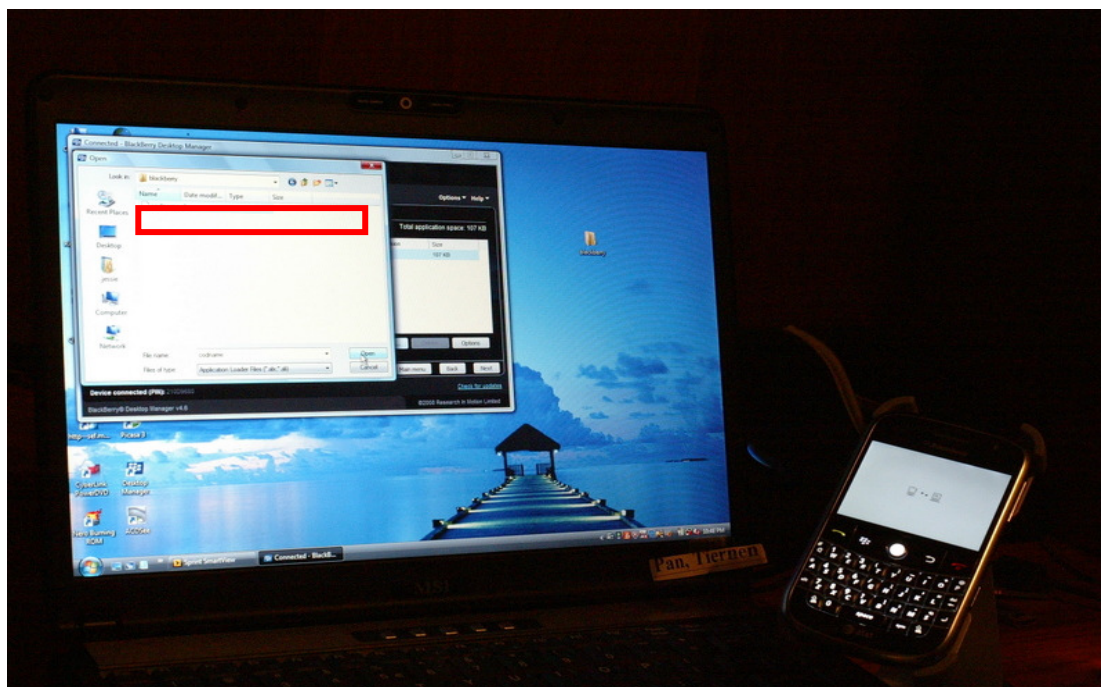
codename.alx  
ALX 檔案  
1 KB



codname.cod  
COD 檔案  
108 KB

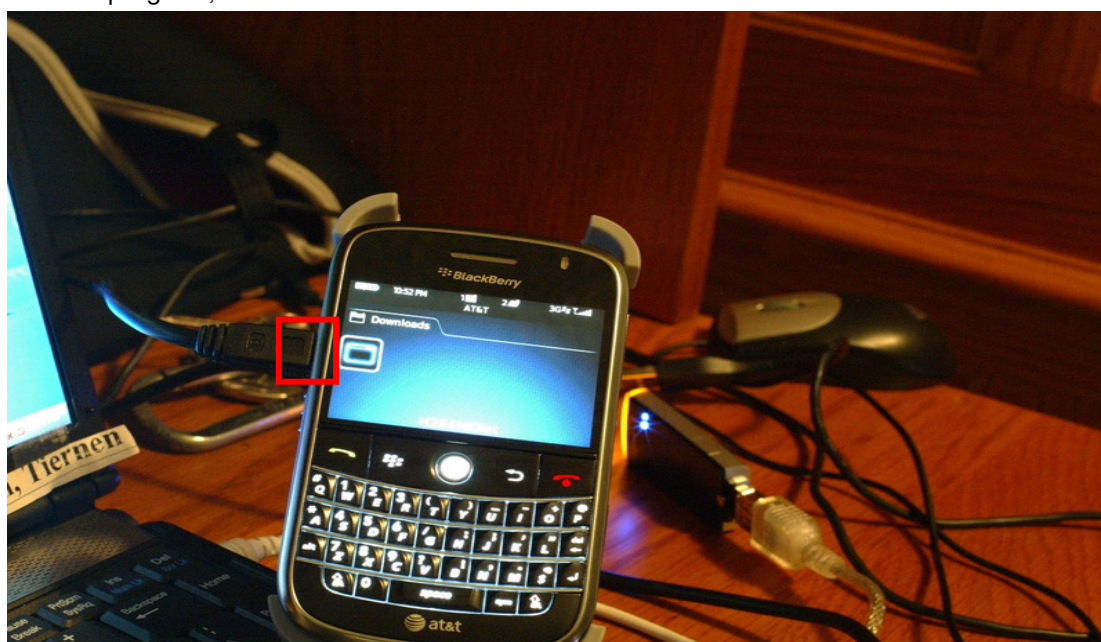


Step 6: Using the Blackberry Desktop Manager go to the location where the “codename.alx” is stored and select the file to execute mobile application installer and install the mobile application on your Blackberry device.



### 7-3.2 Mobile Software operation

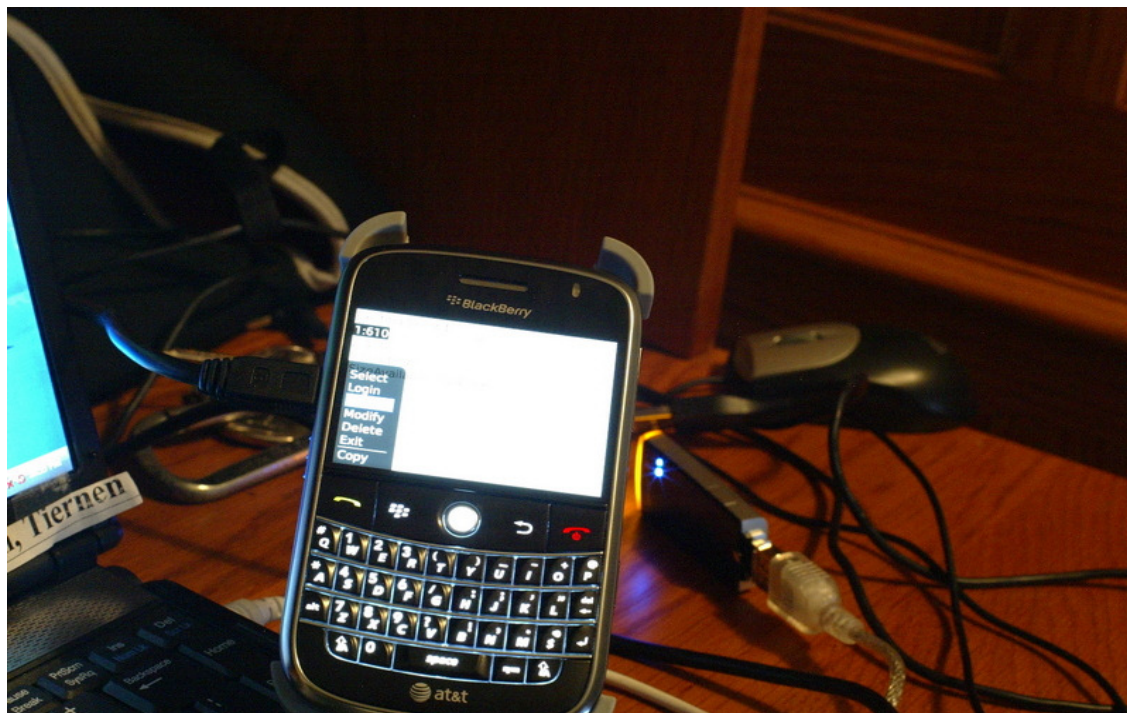
After the software is installed completely, go to the “Download” menu in the mobile device and execute program, “H.264Midlet”



#### 7-3.2.1 Adding new DVR connection

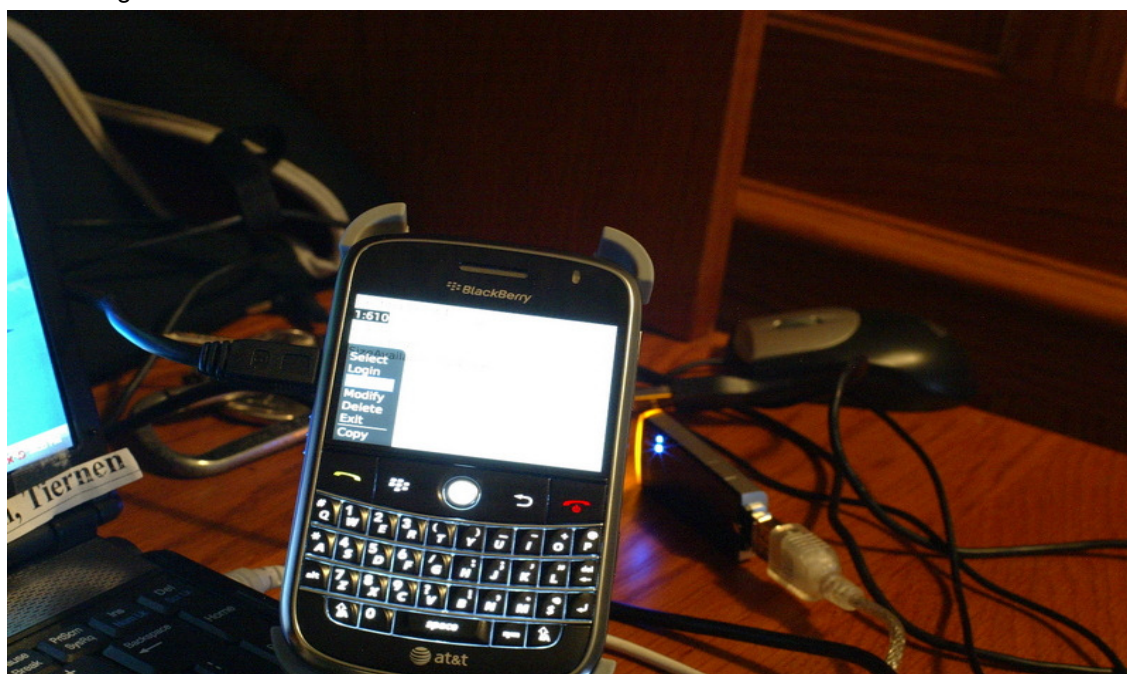
In order to connect to a DVR, the DVR information needs to be loaded on to the mobile device. Select “option” → “Add”, and then enter the information required (“DVR IP”, “port”, “user name”)

and "password"). Press "ok" to save.



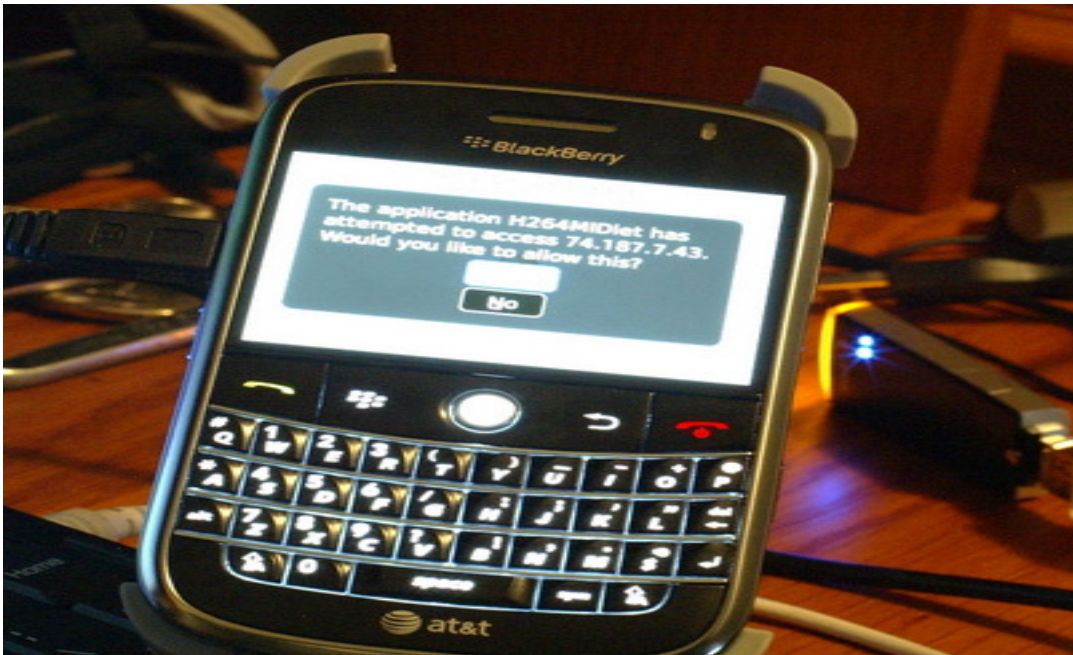
### **7-3.2.2 Log in onto the DVR**

Multiple DVR information can be saved with the software, therefore, please choose the DVR which you want to connect to then Press "Option" → "Login" to log in to the DVR for live monitoring.



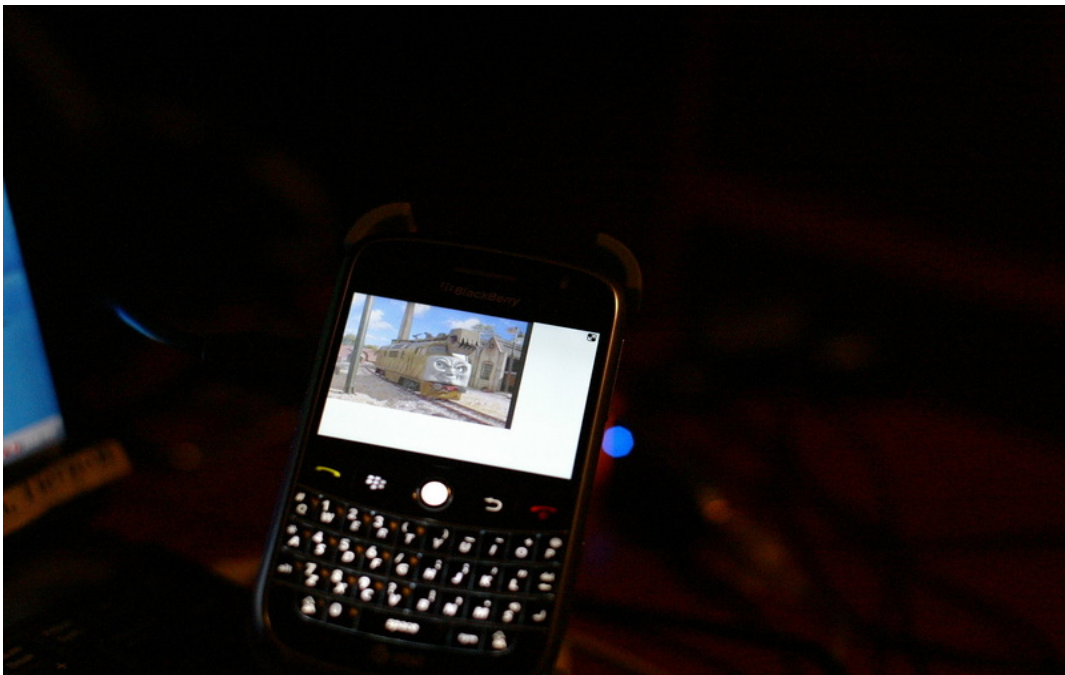
Before connecting to the DVR, there might be a packet download confirmation message which appears on some mobile devices. Press "Yes." (The data usage may incur a fee which will depend on your mobile service provider.)





Connecting time depends on the Internet transmission environment.

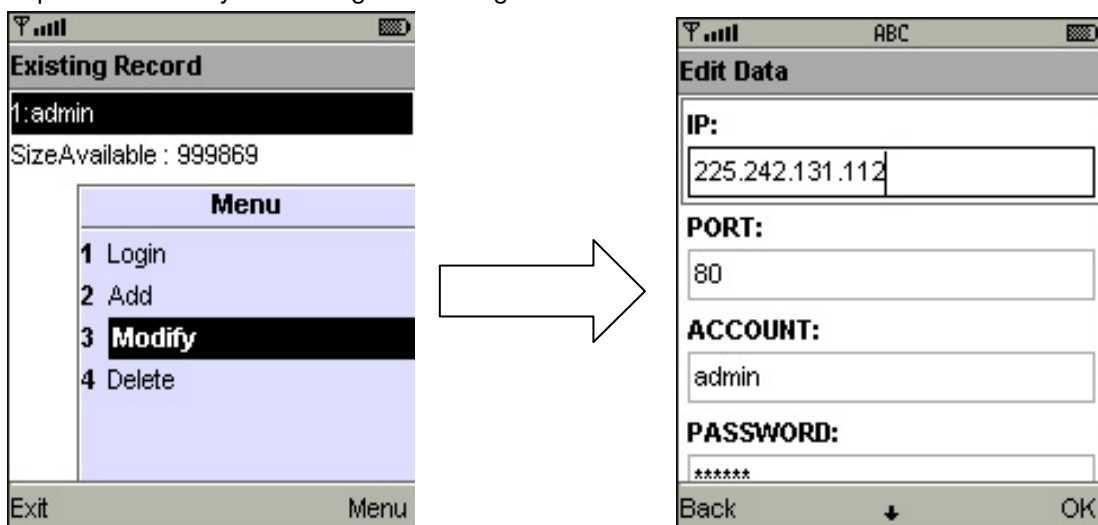
If the connection is successful DVR image appears.



**Note :** If the recording function is not turned on in the DVR, that channel will not be available for live monitoring.

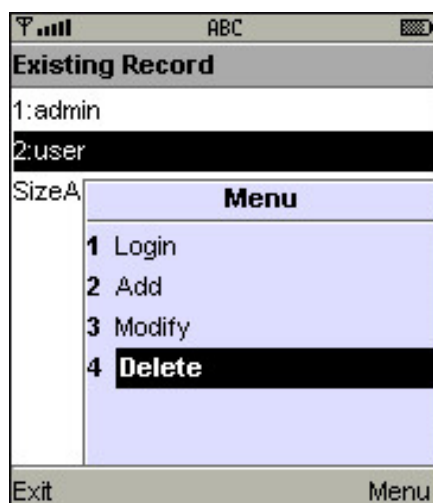
### 7-3.2.3 Modify the Login Information of DVR

If log-in information for a given system wished to be modified, please select that DVR. Enter “Option” → “Modify” for editing the existing data. Press “OK” when it’s finished.



### 7-3.2.4 Delete Existing DVR Record (Connection Information)

If connection information for a DVR is no longer needed, please select the DVR. Press “Option” → “Delete” to delete the DVR connection information.



### 7-3.3 Live Image Operation

After successfully connecting to a DVR a live camera feed will be displayed on the screen. You can change channel displayed, perform image quality adjustments; receive alarms using the mobile application.

#### 7-3.3.1 Live Image Display

The displayed live feed can be changed by selecting “Single” then selecting the channel which needs to be viewed.



**Note:** If recording function is turned off for any channel from the DVR, that channel will not be available for live monitoring.

#### 7-3.3.2 Image size

Due to the varying size of mobile device screens, this software offers two different methods for image display. Press “Size” in menu, and then there will be options, “Original” and “Fit Screen” available to choose from.



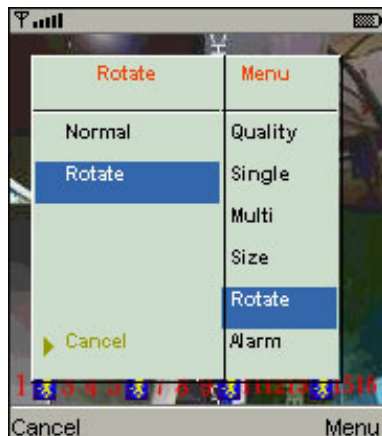
Option	Description
Original	Image appears as its original size.
Fit Screen	Image appears to be the most optimized size according to the screen.

#### 7-3.3.3 Image Rotation

There are two options for live image display. Display the image without any rotation, or rotate



the image by 90 degrees.



Press “Rotate” in menu and there will be options, “Normal” and “Rotate” available to choose from.

#### 7-3.3.4 Alarm

Besides DVR live monitoring, you can receive system alarms through this software. If events like, Motion Detection, Sensor Detection, Video Loss ...etc. occurs, there will be alarm sound and alarm images appear on the status.

Icon	Description
	Motion Detection
	Sensor Detection
	Video Loss

Press “Alarm” in menu, there will be options, “Alarm OFF” and “Alarm ON” available to choose from.



## 7-4 Mobile Application Installation and Operation for Apple iPhone

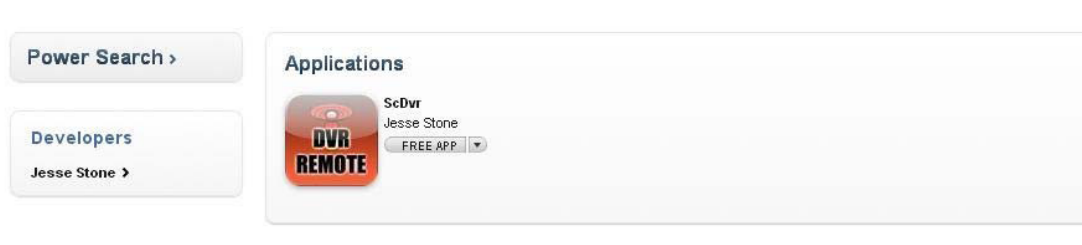
### 7-4.1 Software Installation

Follow the following instructions to install the iPhone mobile application in your phone.

Step 1: Login to iTunes Store/ App store using your devise or a PC, and then input “scdvr” into the search bar to search for the mobile application.



Step 2: You will find the Scdvr icon displayed as below. Click on the icon and it will take you to the download page. Click the “**FREE APP**” button to download the file to your PC or devise.



Step 3: You will find the downloaded file on the directory of Application. If you install the application on your mobile skip directly to step.

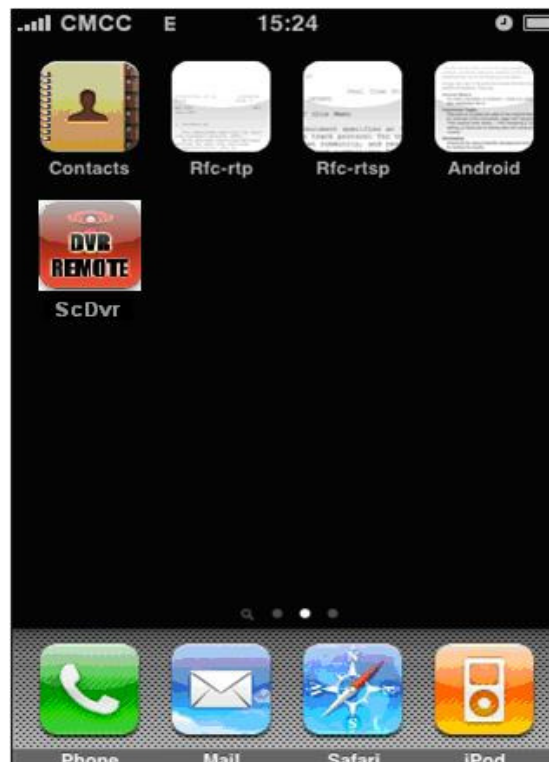


Step 4: Connect your iPhone to the computer, you will find your Device displayed on the left sidebar. Select the DEVICES ID, and then click “Applications” option. Then select “Sync Applications” & “Scdvr” and click “Sync” button.



\* The device ID differs from iPhone to iPhone

Step 5: After finishing the sync, you will find the Scdvr Icon on your iPhone. Select that to launch the application.



## **7-4.2 Mobile Software Operation**

### **7-4.2.1 Adding a New DVR Connection**

In the UiDvr screen select Add button located on the top right hand side corner to add a new DVR connection for remote monitoring. In the Logon Info screen enter a DVR name, the IP address of the DVR, Port number off the DVR (the default is 100), user name and the password for the system. Then select "Go" to initiate the login process.

### **7-4.2.2 Modifying logging information (for a DVR Connection)**

In the UiDvr screen select the DVR connection you need to modify. In the Logon info screen modify the information required and select go (located on the top right hand side corner) to connect to the DVR using the new settings.

### **7-4.2.3 Delete existing DVR record**

In the UiDvr screen select the Edit button located on the top left hand corner and then select the DVR connection which needs to be deleted. A red button called Delete will appear next to the selected DVR, click on that to delete the selected DVR connection.

## **7-4.3 Live image Operations**

### **7-4.3.1 Live image display**

You can monitor 1 channel of the DVR system at a time. To select a different camera tap on the live image to get the application menu then select the channel you wish to monitor. You can select from channel 1 to 16. tap on the arrow pointing downward in the application menu to hide the application menu.

### **7-4.3.2 Live image size**

You can resize the size of the live image by zooming in and out the live feed using normal iPhone hand controls (hand movements which is performed to zoom in and out an image).

### **7-4.3.3 Live image rotate**

The live image will automatically rotate according to your normal iPhone movements.

## 7-5 Mobile Application Installation and Operation for Android Phones

### 7-5.1 Software Installation

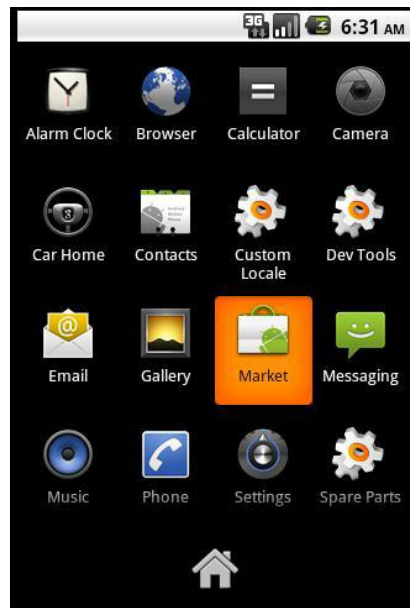
#### System requirements:

Google Android 2.1 System

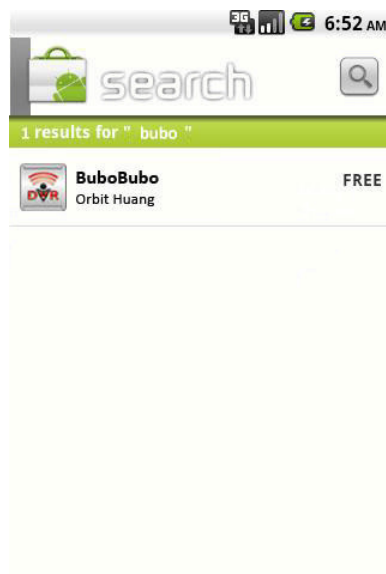
Internet needed for Mobile device operation platform (GPRS/ 3G/ Wifi...etc.)

Follow the following instructions to install the mobile application on your android device.

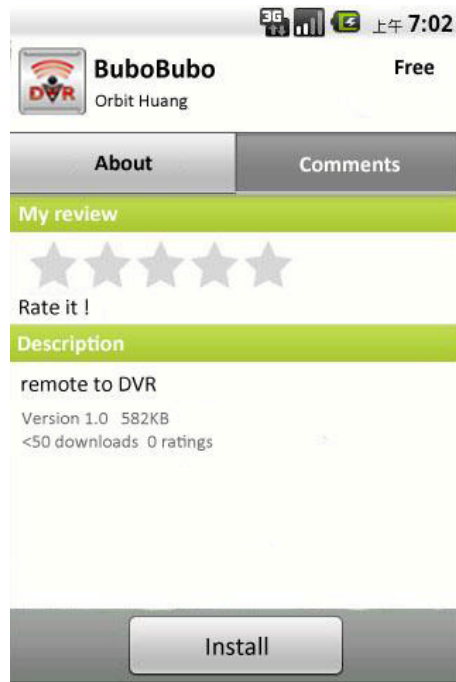
Step 1. Open App market in your phone.



Step 2. Search for the mobile application "Bubo Budo".



Step 4. Choose “BuboBubo” and click “Install” button. When the installation is complete tap on the icon to launch the application.



### 7-5.2 Mobile Software Operation

When the application is opened for the first time, there will be a empty record (dvr1) by default.



When the **Edit** button is selected, the Edit button turn to gray and the list is editable.



Enter the DVR's name, IP address, port, user name, password and the desired image format and save the new configuration. The following will give you an over view of the different icons.

JPEG / H264 : Image format (JPEG will produce a sequence of images, h264 will produce a video stream)

Save : Save the record

Clear : Clear up all fields

Cancel: Do nothing and return the list

Delete: Delete this record.

When the configuration of the DVR connection is completed depress the **Edit** button (Edit button turns white) go to the connection mode.

Select the new button to add a new DVR configuration.

To establish a DVR connection select the desired DVR configuration. This will initiate a DVR remote connection. If h264 has been selected as the image type the connection will take longer time to display the initial camera feed.



### 7-5.3 Live image Operations

There are several options available to for you to choose when in Live mode



The **Type** icon (the icon in the bottom right hand side corner) shows the image's data type ( H.264/ JPEG ). Click this icon to switch between and two available data types.

Click on the **Ch** icon and choose other channels

Click on the **Quarter** icon for quad view, (only supported with JPEG)

Click on the **Login** icon, return to login list.



When in Landscape mode, the toolbar is hidden by default, tap on the screen to get the tool bar. Taping on the screen again will hide the tool bar again.



## CHAPTER 8 CMS INSTALLATION AND USAGE GUIDE

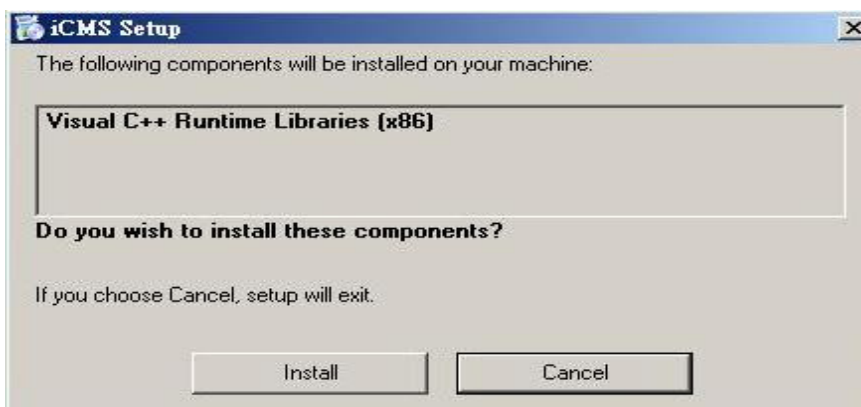
### 8-1 CMS Installation

#### System Requirement:

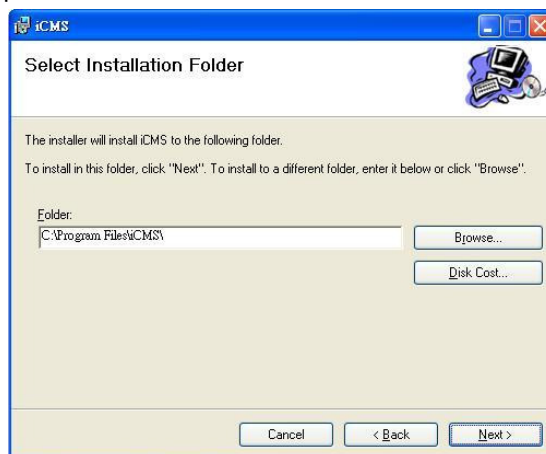
- \* Intel Pentium 4 processor or equivalent.
- \* Microsoft Windows Vista 、 Windows XP 、 Windows 7, Windows 2003 Server.
- \* 512MB minimum system memory.(500M requested for group DVR connection and 180M for single DVR)
- \* 20MB HDD space. Recording and image capturing require extra space for storage.
- \* VGA capable of handling DirectX9 and function well while running it. Please refer to p 47 Note 1.

#### Installation:

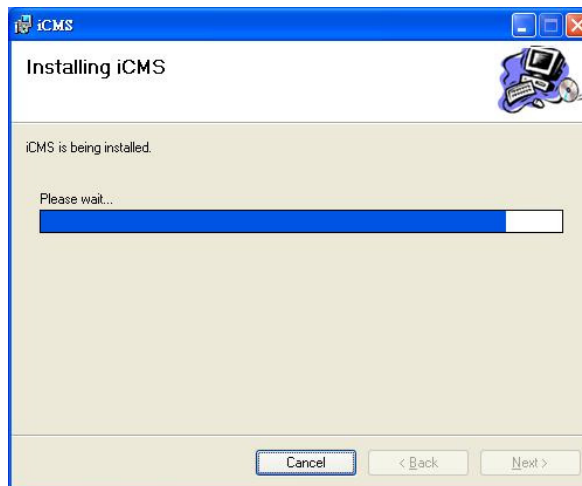
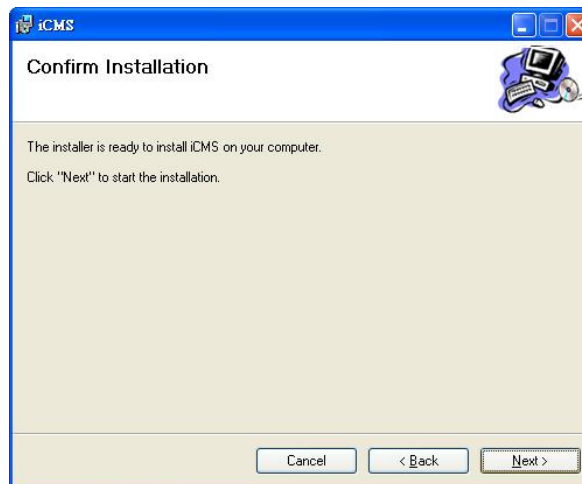
1. Go to the CMS folder in the DVR User Manual CD (Packed with the DVR).
2. Decompress and execute “**setup.exe**”.
3. If “Visual C++ Runtime Libraries” has not been installed before in the operating PC, the following window will be shown to suggest an automatic installation of the required files.



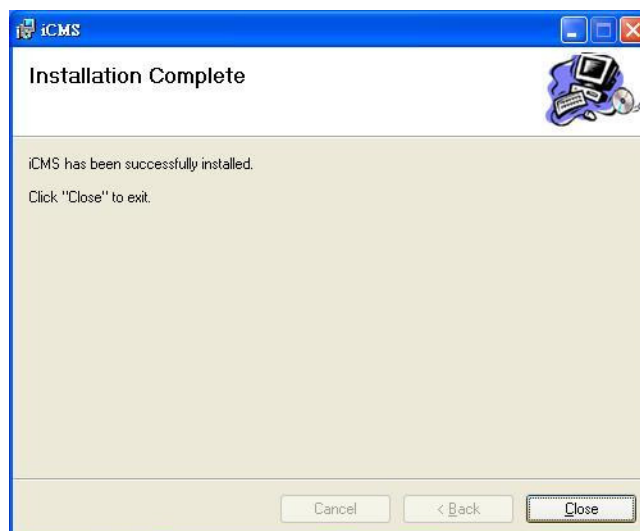
4. Select “**Next**”, and then select “**Browse**” to change installation path if needed. To check available space on the hard disk, please select “**Disk Cost**” and then please select “**Next**” to go to the next step.



5. "Confirm Installation" window shows. Select '**Next**' then the installation starts.

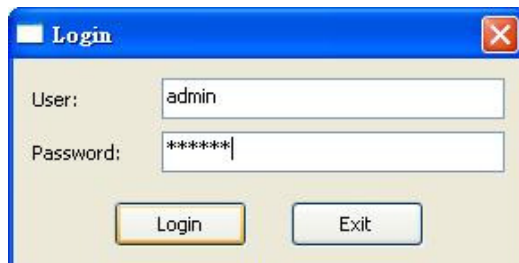


6. Select '**Close**' to finish installation when the "Installation Complete" window is shown.

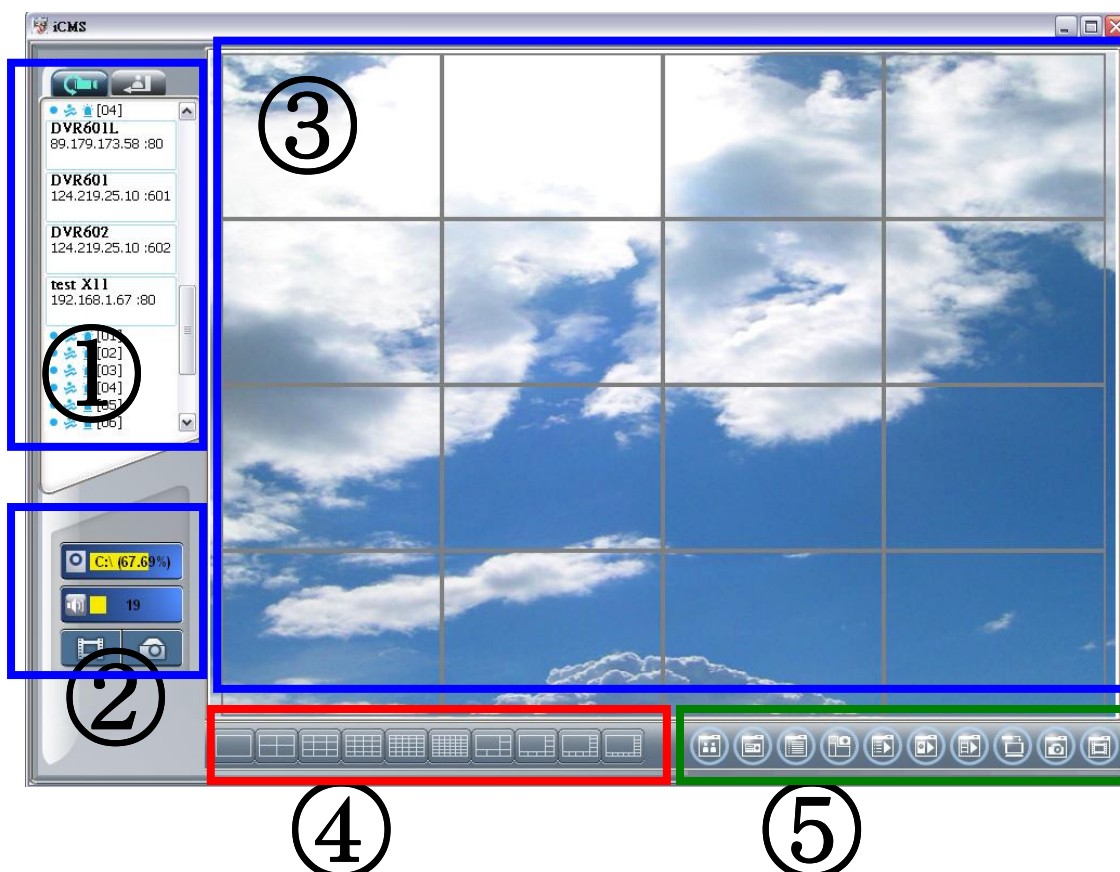


## 8-2 CMS LOGIN AND ENVIRONMENT

You need to login to the system before you can start using the CMS system. The defaults are 'admin' and '123456'.



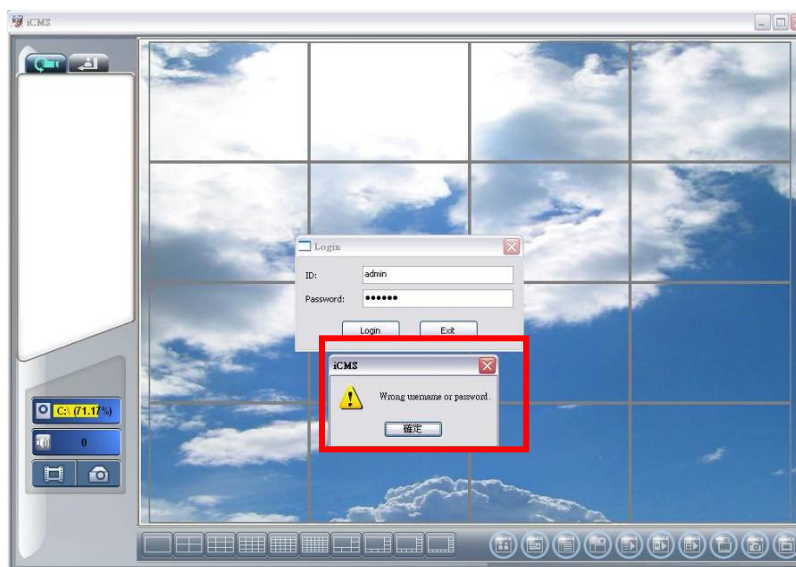
After successful login, the following image will be shown on your screen:



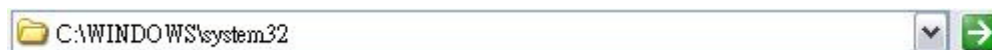
<b>1 DVRs, Groups &amp; Events</b>	Information about DVRs, groups and events. See "8-3 Information List" for more detail.
<b>2 PC information and control</b>	Information about local PC's hard disks, volume, recording...etc. See "8-4 PC Information and Control" for more detail.
<b>3 Main Display</b>	Live image display area. See "8-5 Main Display" for detail.
<b>4 Display Modes</b>	Different display modes supported by CMS.
<b>5 Operation Bar</b>	A set of 10 operations are provided by CMS. See "8-6 Operation Bar" for detail.

## Instruction for Log-in Failure to CMS after CMS Upgrade

When trying to login to the CMS using the default account and password after a CMS upgrade an error message will be displayed. If an error message occurs as shown in the image, please follow the instructions below to rectify the error.



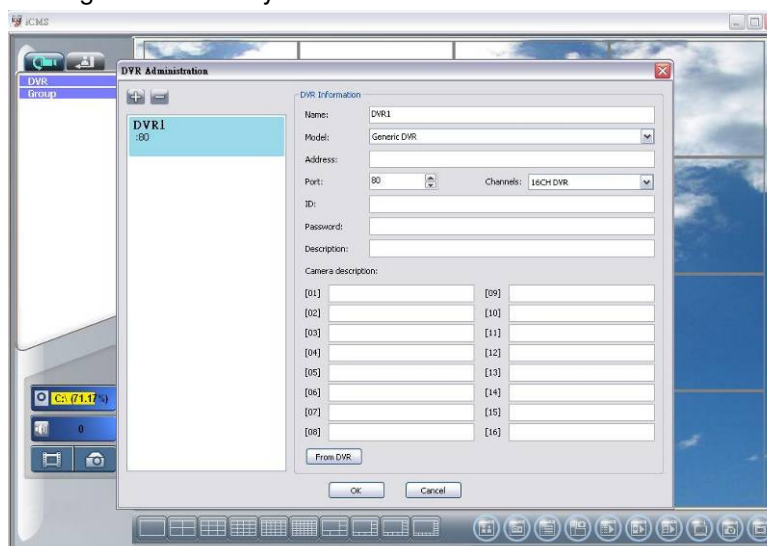
Step 1: When in Windows go to the “Windows” folder and then the folder “System32”  
(Eg:C:\Windows\System32)





Step 2: Locate file, “iCMS.dat” and delete it.



Step 3: Restart CMS. Log-in successfully.



### 8-3 DVRs, Groups & Events

Icon	Description
	View the list of logged in DVR/s AND/OR DVR Group.
	View Logs: lists all the event information of a DVR

#### 8-3.1 View DVR/Group List




Single left click on 'DVR' or 'Group' will expand/collapse the entire DVRs and groups list.

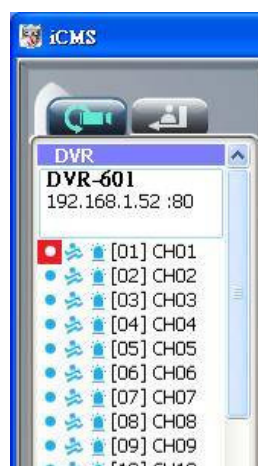
On the DVR list, **double left clicking on a connected DVR will show its images in main display.** See "8-6.2 DVR Administration" for further information.

On the Group list, **double left clicking on a group will show live image of all the channels in that group in the main display.** See "8-6.3 for Group Administration" for further information.



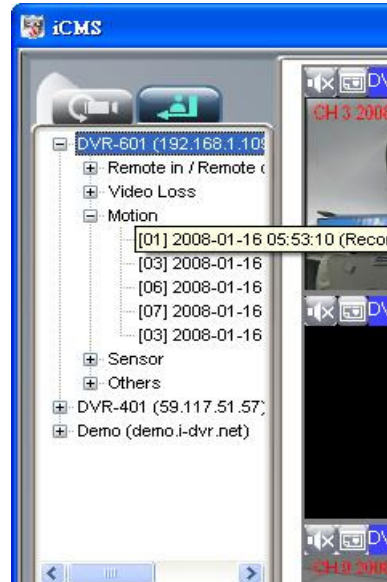
Left-clicking on a connected DVR will expand/collapse status of all its channels as below:

Icon	Description
	Video Loss
	Motion Detected
	Sensor Triggered



### 8-3.2 View Event Logs

In this window, all the events of a DVR can be expanded/collapsed in the order of Remote in / Remote out, Video Loss, Motion, Sensor, Others (Power Reset, Key Lock, Key Unlock, and HDD Full).



### 8-4 Local PC Information and Control

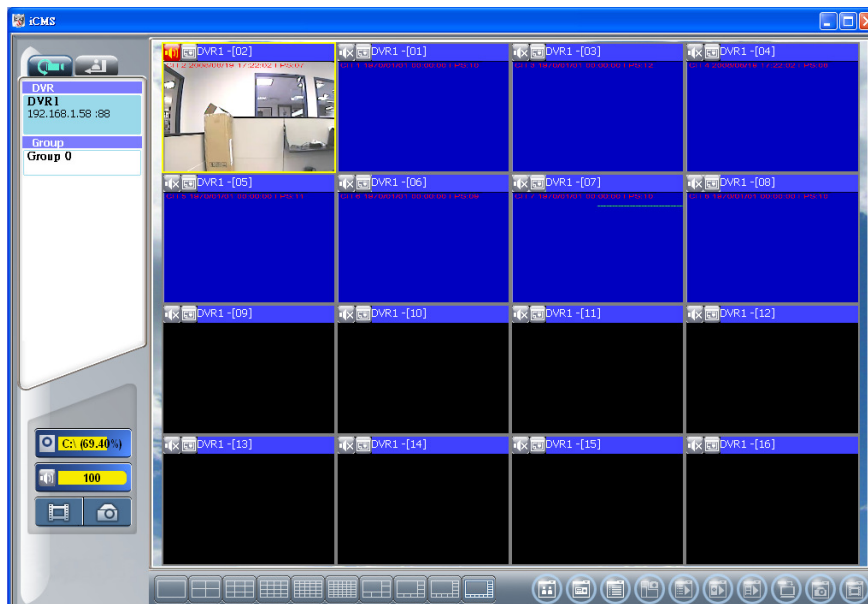
This section is Located at the left lower corner of the screen, please see the chart below for a detailed description of the information available.

Icon	Function	Description
	<b>HDD info</b>	Shows the percentage of available space in the root directory. C:\ drive (where CMS is installed).
	<b>Recording Directory</b>	Setting Recording Directory. (Default is C:\Program files\iCMS)
	<b>Recording Cycle</b>	Set the capacity size of the Recording space. (minimum is 10MB)
	<b>Volume</b>	PC volume or playback volume control bar.
	<b>Recording</b>	Record live images to local PC. To view locally stored data, use "Record" button located in the operation bar. Also see "8-6.6 recording data" for detail.
	<b>Snapshot</b>	Takes a snapshot of the current image and saves it in the local PC storage. To view all the snapshots you've taken, please go to "Snapshot" button located in the operation bar. See "8-6.5 Snapshot data" for detail.





## 8-5 Main Display

The main display area is where the live image of the DVR is shown. You can drag to change the location of screen for each channel and turn on/off audio signal with mouse-click.

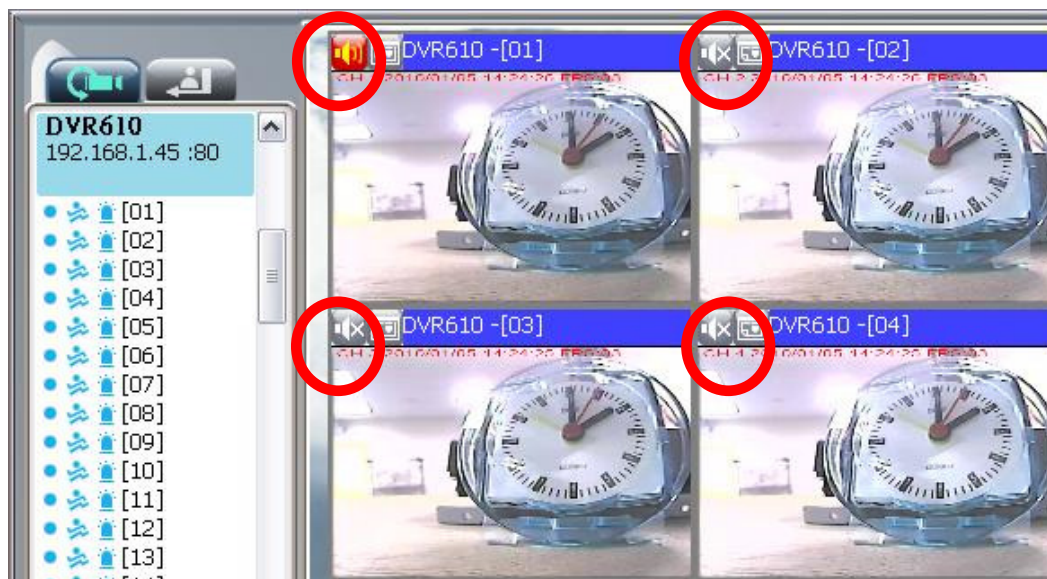


### 8-5.1 Audio Control

In live mode, you can turn on/off the audio signal for Ch1~Ch4:


- ☒  Audio signal is On
- ☐  Audio signal is Off

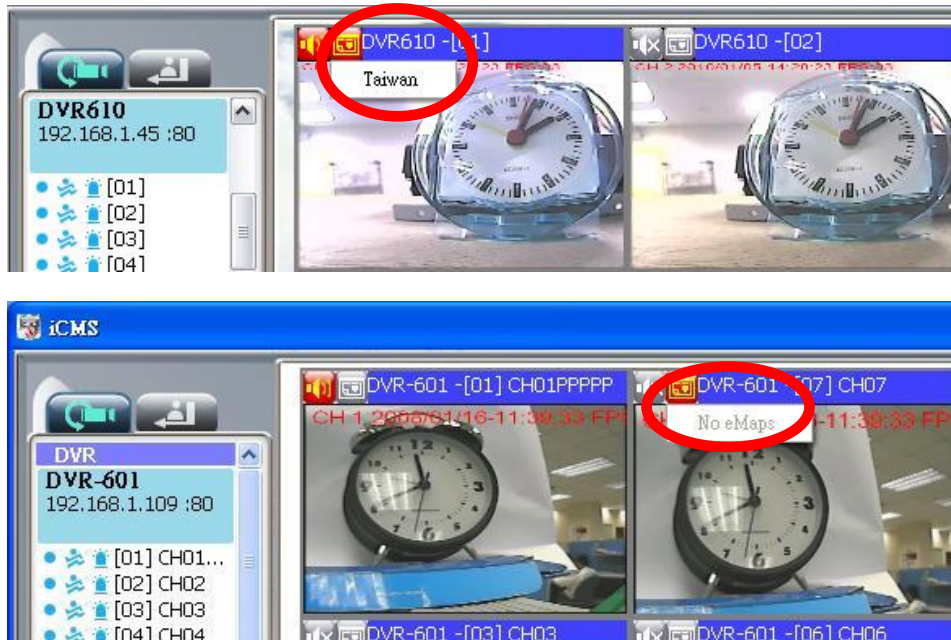
Turn on/off by clicking on the graphical icon, please note that the application can only handle one audio channel at a time.





### 8-5.2 eMAP Display

In Live mode, pressing  will show the e-MAP menu. If the channel has been set up to use e-MAP, the menu will show all the e-MAP titles that have been assigned to this channel; otherwise, "No eMaps" will be shown. Please check "8-6.4 eMAP administration" for setup information.



### 8-5.3 PTZ Control

In the main display, right clicking on a live image will bring up the PTZ controls for the selected channel.



Icon	Description
8 direction key	Rotate the PTZ
	ZOOM+ : Zoom in
	ZOOM : Zoom out
	Setup the PTZ position as pre-set N.
	FOCUS+ : Focus in
	FOCUS- : Focus out
	Move to pre-set N.
Set PTZ Preset	Setup 16 pre-set N.
Go to PTZ Preset	Move to specific pre-set N.
	Activate auto pre-set tour*
PTZ Sensitivity	Setup PTZ sensitivity*
	Setup the “start” and “end” of liner scan.*
	Activate the liner scan cruise.*
B	Adjust the Brightness (Down is +)
C	Adjust the Contrast (Down is +)
S	Adjust the Sharpness (Down is +)








\*PTZ communication protocols differs from manufacturer to manufacturer and not all PTZ functions listed here are implemented by all the manufactures. Therefore, some of these functions may be unavailable.

## 8-6 Operation Bar

10 Operations to be listed as below:





**Table 8-6.1** description of the functions in the operations bar

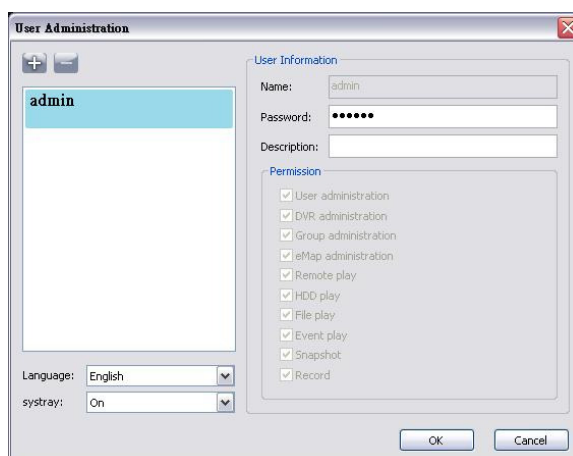
Icon	Description
	User Administration. Please see “8-6.1 User administration”
	DVR Administration. Please see “8-6.2 DVR Administration”
	Group Administration. Please see “8-6.3 Group Administration”
	eMap Administration. Please see “8-6.4 eMap Administration”.
	Remote Playback. Please see “8-6.5 Remote Play”.
	HDD Playback. Please see “8-6.6 HDD Play”
	File Playback. Please see “8-6.7 File Play”
	Event Playback. Please see “8-6.8 Event Play”
	Snapshot Data. Please see “8-6.9 Snapshot”
	Recording Data. Please see “8-6.10 Recording”

### 8-6.1 User administration

Before the CMS can be used on a PC, user accounts should be added with proper authority. Each user should also be assigned a password and optionally a description. If a user does not have certain authority assigned, he/she will not be able to operate the corresponding functions on the Operations Bar. By the default no authority is assigned. The administrator should assign proper authority to each user. These user accounts can be deleted or edited later on.

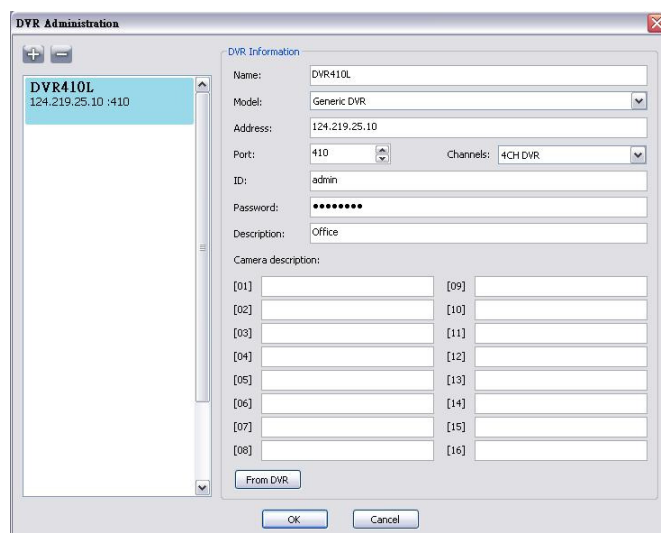
Select “OK” to save the setup.

Icon	Description
	Add a user account. The default authority is with no permissions.
	Delete a user account.
Language	Switch display language
systray	If this feature is turned on, when the program is minimized, it will shown in the system tray as an icon. (The CMS software needs to be restarted for this change to be applied to the CMS application)



### 8-6.2 DVR Administration

DVR connections can be added to or deleted from the CMS and their information can be edited. DVR's channel names can be entered here or downloaded from the DVR by pressing 'From DVR'. Select “OK” to save the information.



**Name:** DVR Name (Can not be repeated)

**Model:** DVR Model

**Generic:** For General Models

**Generic Mainstream:** For Dual Stream Models

**DUAL SDVR:** For MPEG4 2U Models

**Address:** DVR IP Address

**Port:** DVR Network Port

**Channel:** DVR Camera Number

**ID:** DVR Login Name

**Password:** DVR Login Password

**Description:** Other Description

**Camera Description:** Camera Description

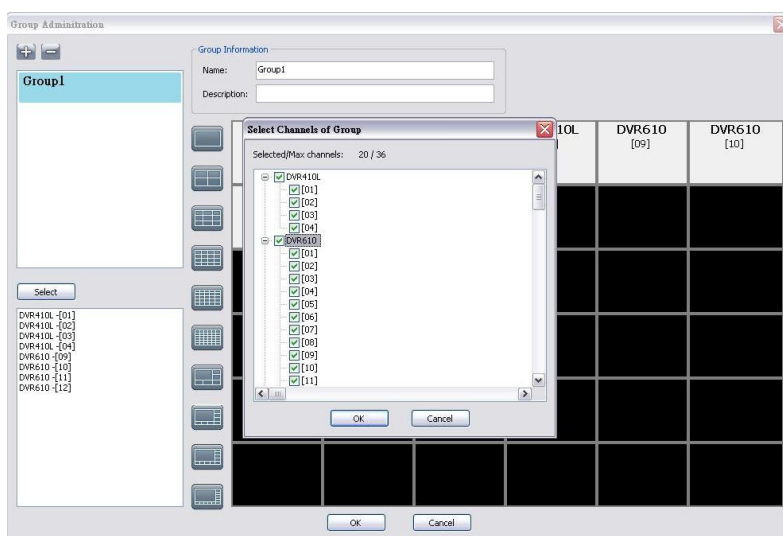
**From DVR:** Load Camera name from DVR

### 8-6.3 Group Administration

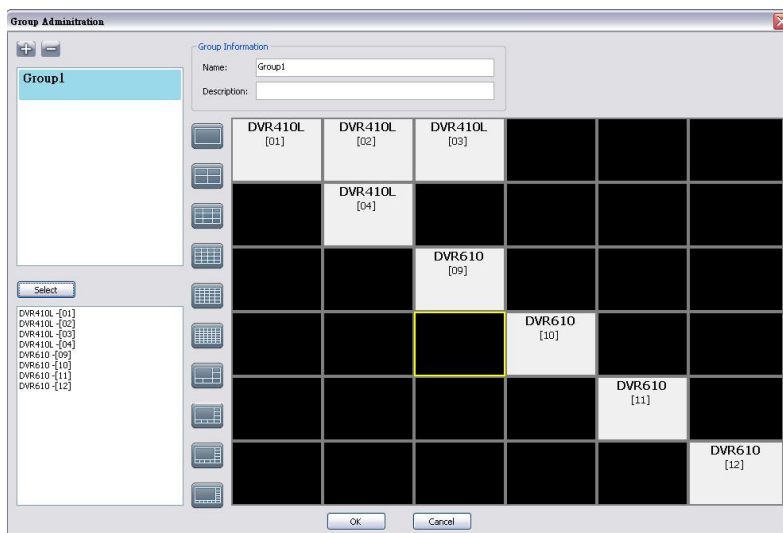
A 'Group' means a set of video channels from one or many DVRs, which means, users can organize channels from different DVRs to be set in a group. This function allows you to monitor and manager channels from multiple DVRs easily and flexibly.

#### Steps:

1. Add a new group and name the group with a name and a description.
2. Click '**Select**' which will bring up a new window.
3. Check the specific channels that you'd like to be included in the group. To include all channels of a DVR, just check the DVR.(Up to 36 cameras can be in 1 group)




4. Click "**OK**" to return to the previous window.
5. Select a display mode.
6. Drag a channel from the lower left panel into the main displays preferred location. Or, change the channel location in the main display by mouse dragging.
7. You can '**Select**' again to add other channels, but then any un-saved channel locations will be lost.
8. Click "**OK**" to save the setup.

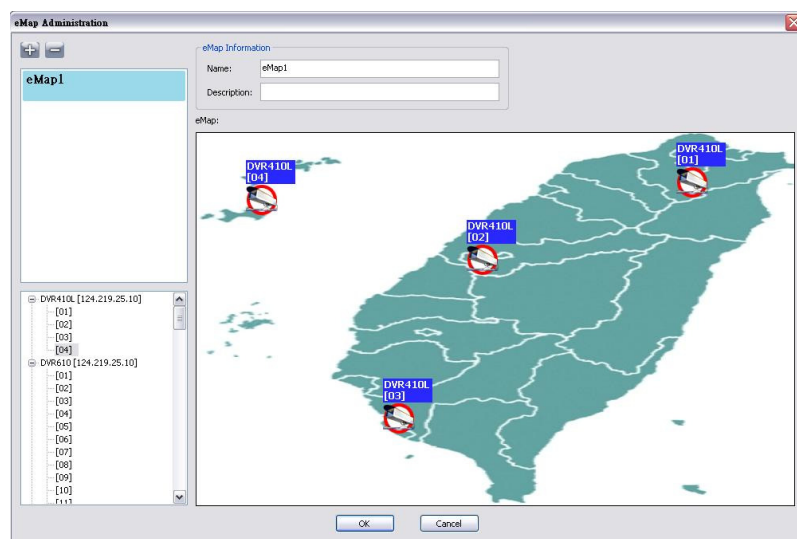


### 8-6.4 eMap Administration

If geographical locations are relevant, or if it is desired to use a picture as the background, eMap can be used for this purpose. With eMap, a background picture can be picked by the user and channels from multiple DVRs can be placed and dragged around on the picture.

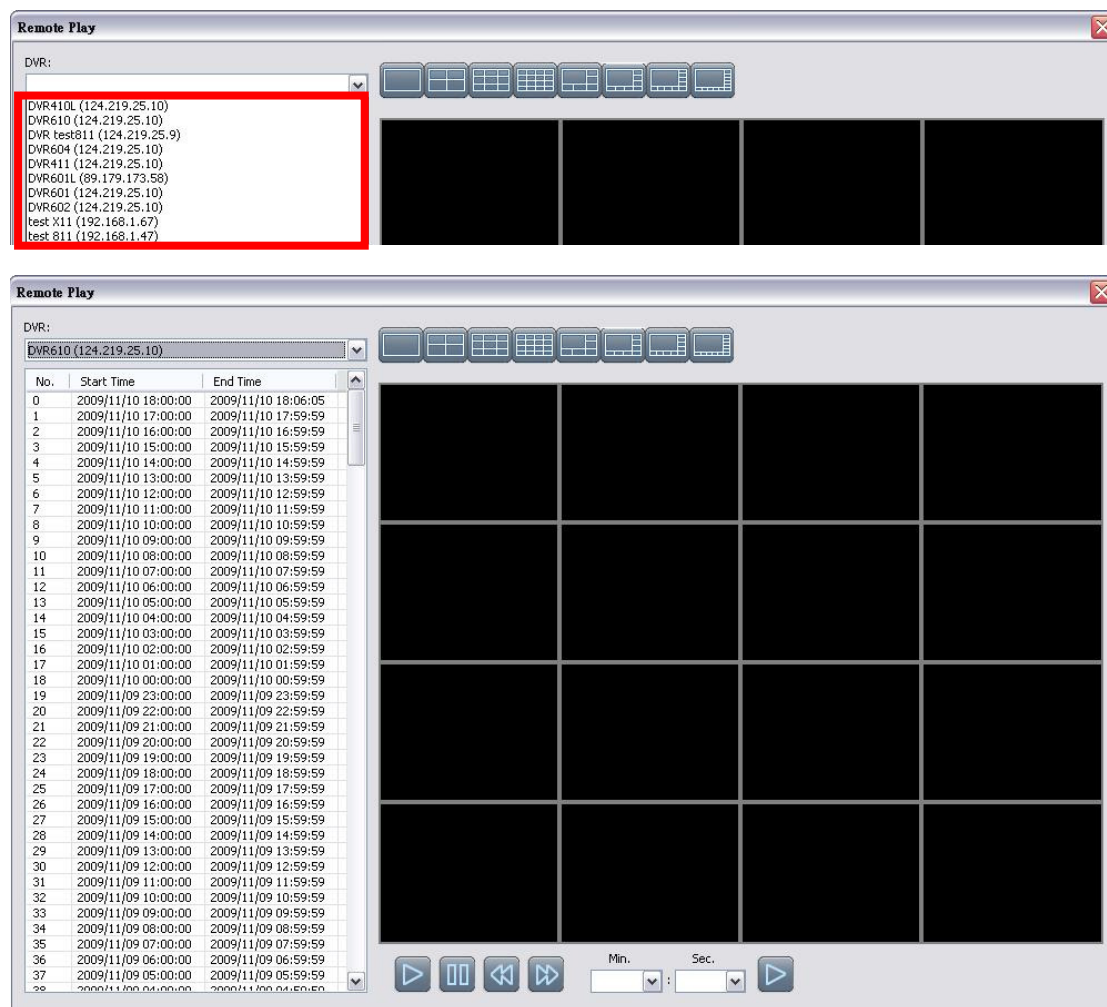
Steps to follow:







1. Click  to select the path of the eMap image.
2. Select a picture, and click OK for that picture to be shown in the right panel.
3. Drag channels in the left lower corner onto any place in the picture.
4. To delete a channel already on the picture, right click the channel and click 'Remove'.
5. Click OK to save.



### 8-6.5 Remote Play

Video images recorded on a DVR can be displayed on remote CMS using the Remote Play function. Select a DVR from dropdown menu and a display mode from the top of the screen. After the recorded segments are listed below, double click on one to show that segment on the right display panel.

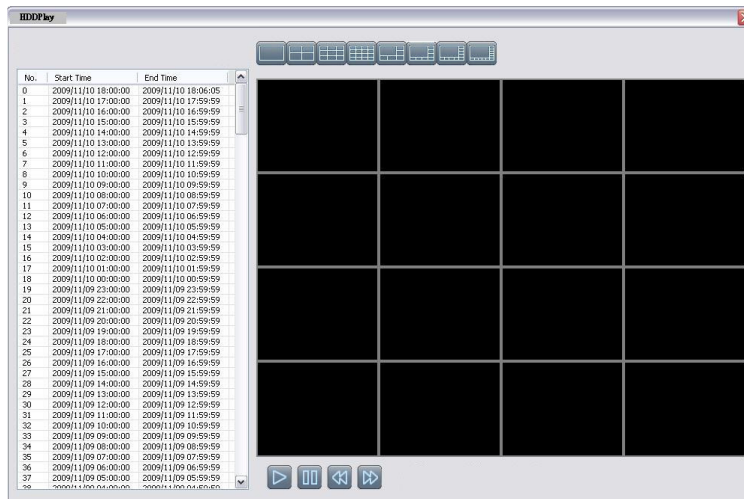


Icon	Description
	Start playing.
	Pause.
	Fast forward.
	Fast rewind.
	Select the size of the clip you want to watch by selecting the number of minutes and seconds, Then Press the  butt on to start playing that clip



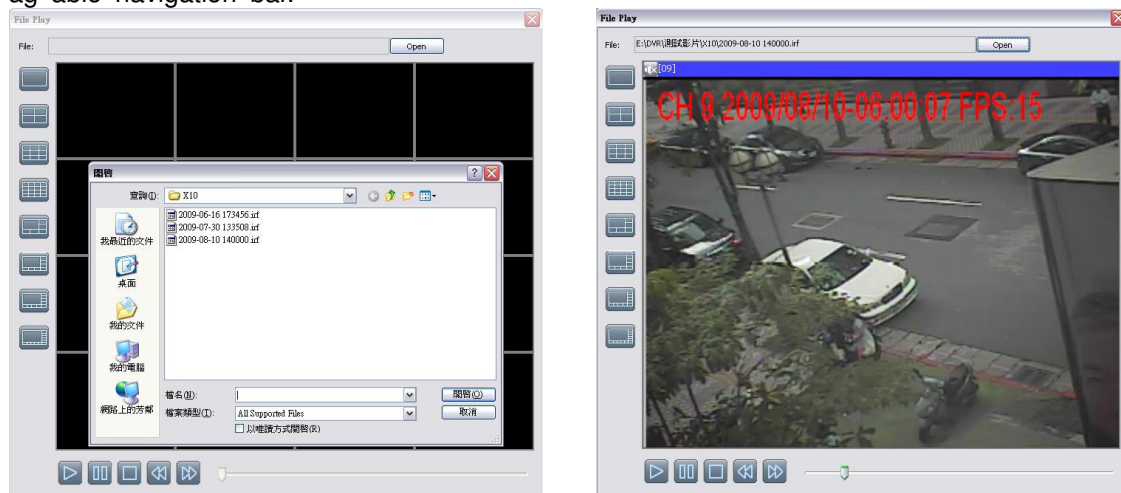
### 8-6.6 HDD Playback

You can use the CMS to play back the recorded data captured by the CMS to the local HDD in the remote PC. The left part of screen shows recorded data in a list separated by every hour. You can change the display modes and play files in normal fast forward or rewind. Pausing of playback is also available.



### 8-6.7 File Playback

You can play backed up .irf files using the “File Play” function of the CMS. It allows you to change the display mode, forward or rewind the file and file navigation using the drag able navigation bar.



Icon	Description
	Start Playback.
	Pause.
	Stop playback.
	Fast forward.
	Fast rewind.



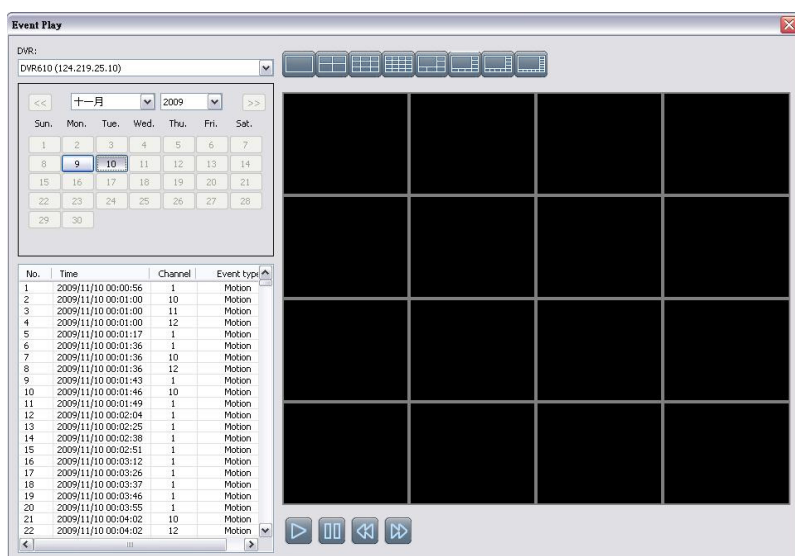
## 8-6.8 Event Playback

Event recordings on the DVR can be played back in CMS.

Steps to follow:

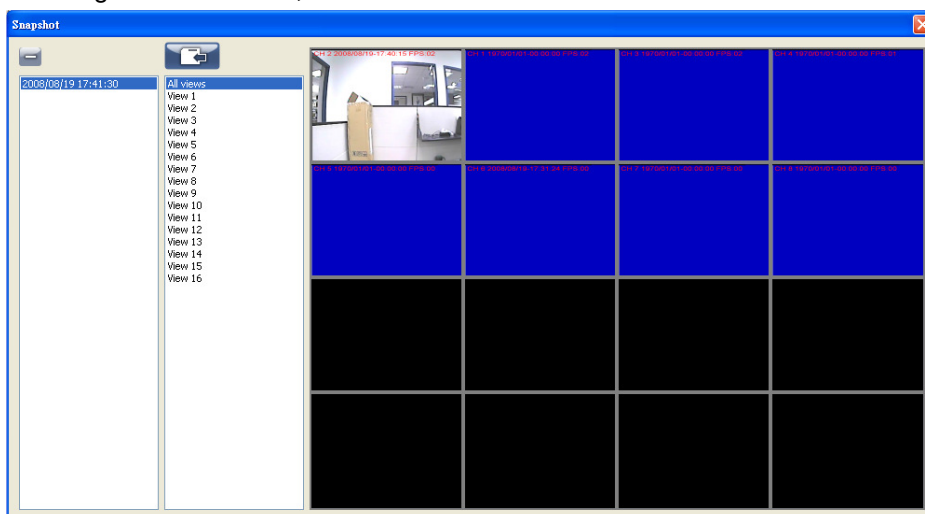
1. Select a DVR and a display mode.
2. Select a date.
3. Double click an event and play back the event on the right hand display panel.

Use buttons at the bottom to control the playback.



## 8-6.9 Snapshot Data

This function will display all the snapshots you've taken using the CMS. You can review, delete or save the images as other files, here.



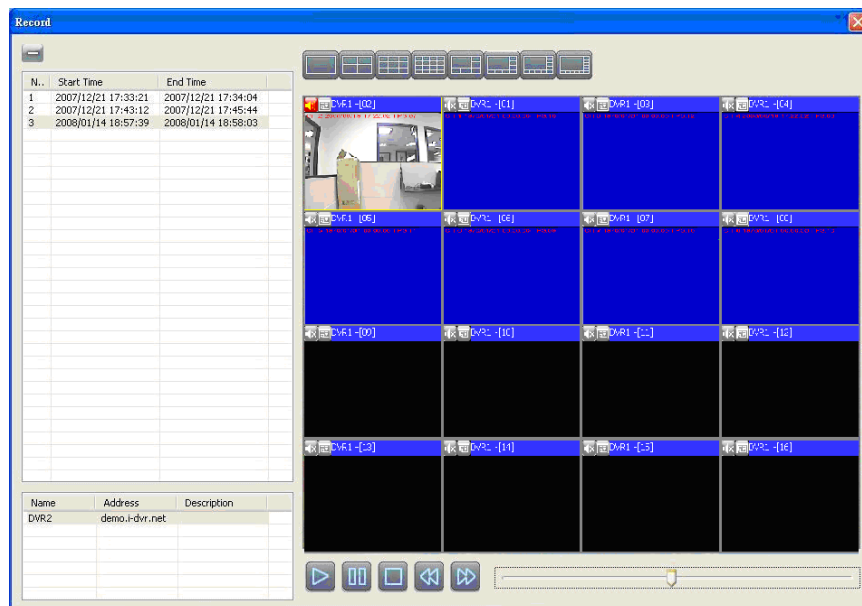
\*The date and time shown on the snapshot in the date and the time the snapshot was taken.

### 8-6.10 Recording Data

This function is used to playback all the recording files you've recorded using the CMS. You can play or delete them here.

#### Steps to follow:

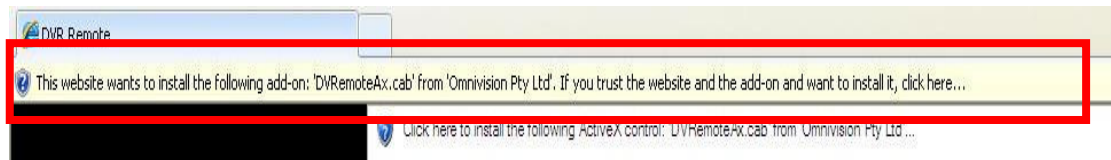
1. Choose the desired recording from the left plane of the window to playback recording on the main display.
2. You can choose the display mode.
3. Time bar will be shown at right lower corner; please drag the time bar to navigate to a specific recording time you'd like to view.



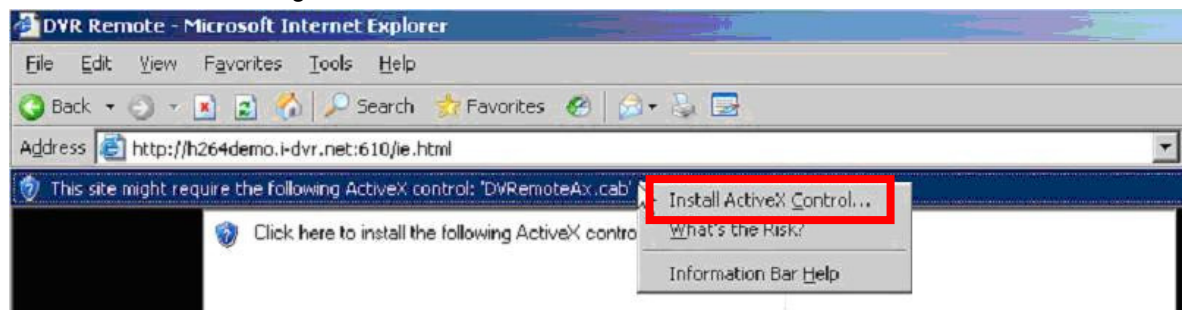
## APPENDIX I Remote Monitoring IE ActiveX Control Installation Instruction

When using IE for remote monitoring for the first time, IE ActiveX Control is needed to be downloaded.

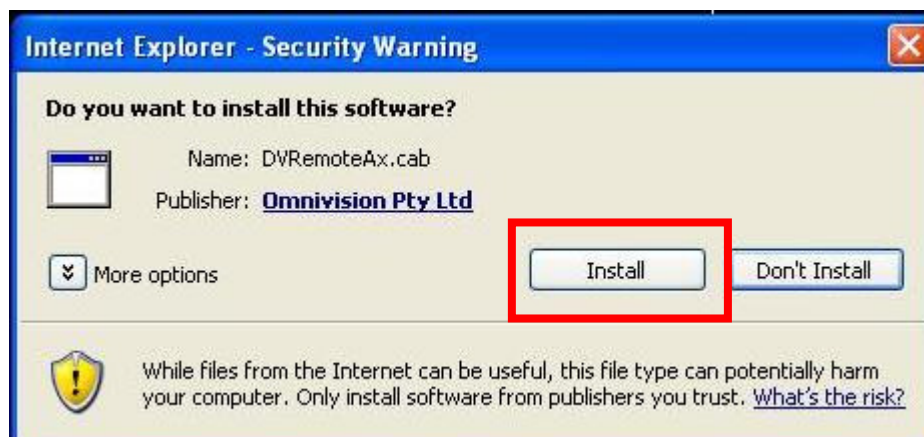
1. When remote monitoring on IE for the first time, an alert message occurs "Install ActiveX control" on the tool bar.



2. Click at this alert message and select "Install ActiveX Control"



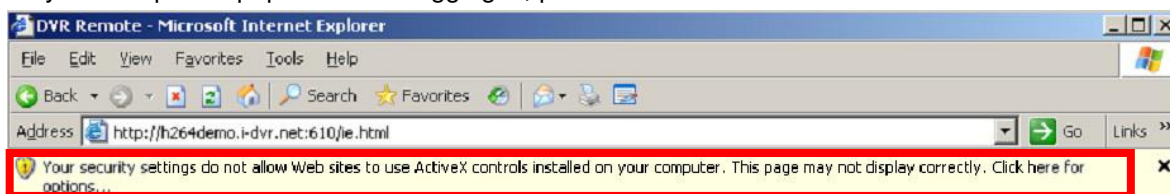
3. "Do you want to install this software" alert pops up. Select "Install"



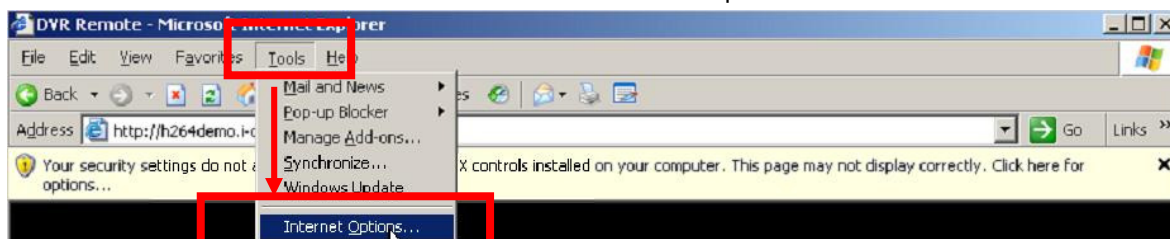
4. After installation, IE remote monitoring image appears.



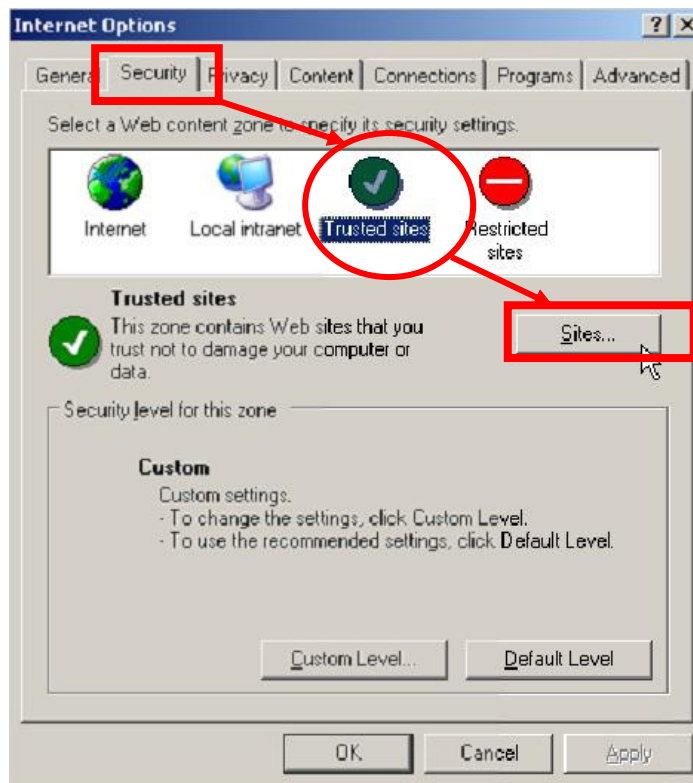
5. If message, "Your security Settings do not allow web sites to use ActiveX controls installed on your computer." pops on when logging in, please follow the next instruction.



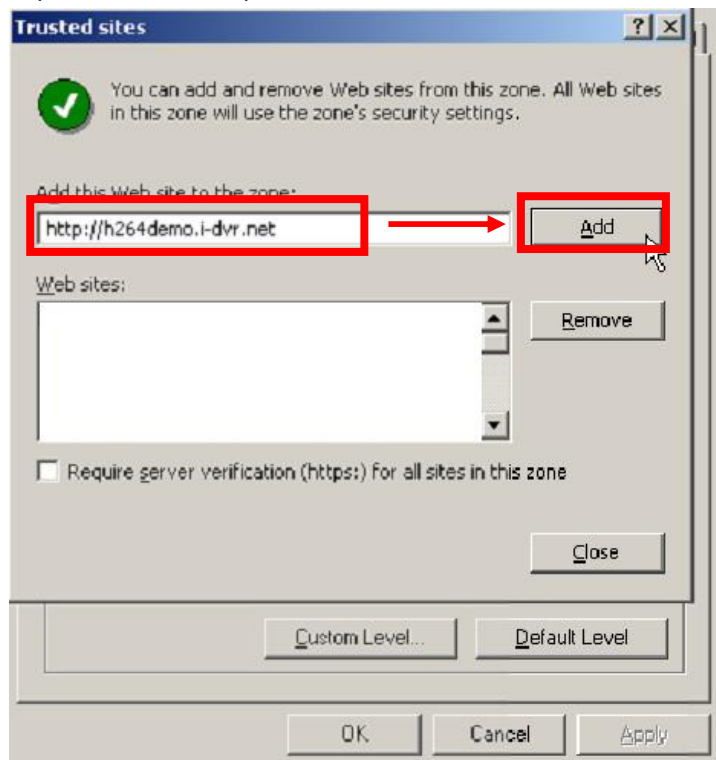
6. First select "Tools" on the tool bar and then select "Internet Options"



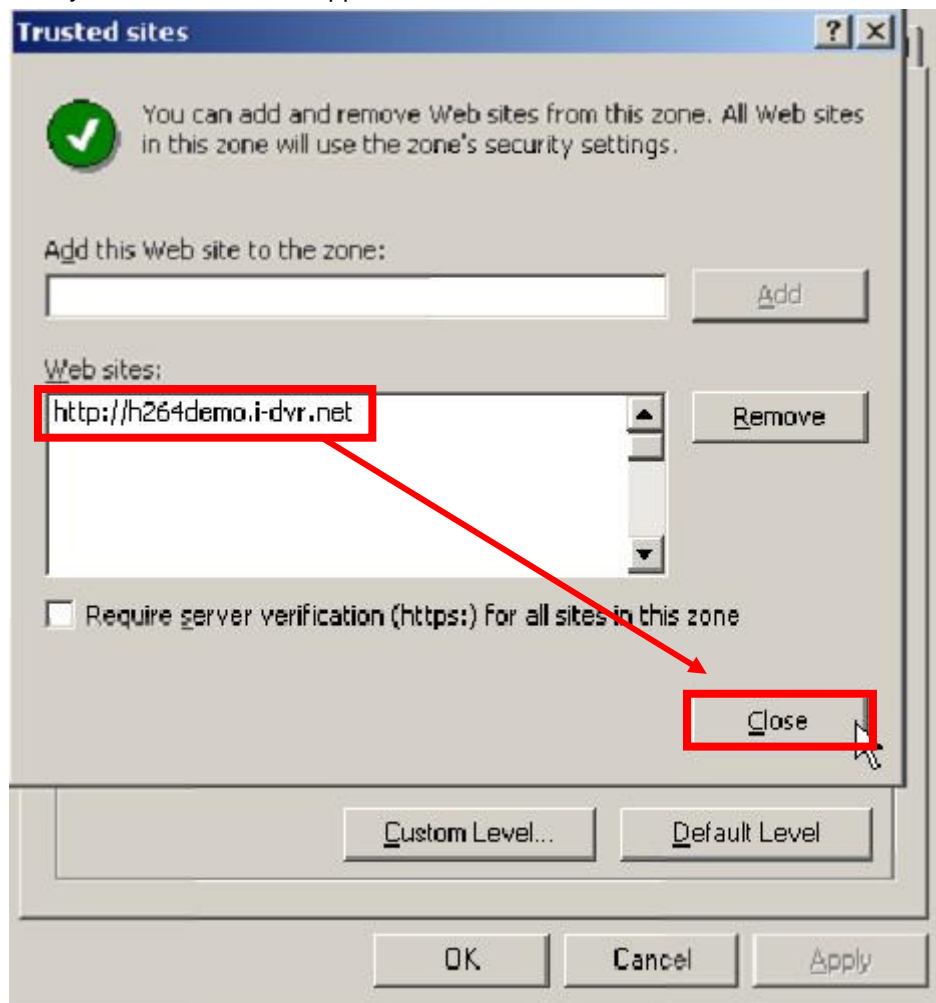
7. Select Security → Trusted Sites → Sites



8. Enter the DVR address (The address shown below is a demonstration only. You need to input the correct address of the DVR according to your setup.) into the blank text box shown in picture, and then press “add.”



9. Newly added website will appear under the trusted web sites list. Press close.



10. Go back to IE window, press refresh button or F5.

